BRUHAT BENGALURU MAHANAGARA PALIKE

TENDER DOCUMENT – KW4

Name of Work

“Package No. - 3 - RRND - (a) Construction of R.O Plant,Anganawadi Kendra,Samudaya Bhavana in Akkiyappa Garden in Ward No-17 J.P Park (1 Work), (b) Renovation for Samudayabhavana near Ambedkar Colony Ward No-69 Laggere (1 Work) & (c) Renovation and Construction of GMPS School Mallathahalli (1 Work) & Improvemnts and Development of Anganawadi Kendra Old Mallathahalli in Ward-129 Jnanabharathi (1Work) - Total (4 Works) in RR Nagar Division for the year 2023-24.”

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SECTION 1: INVITATION FOR TENDERS (IFT)

ENCLOSED SEPERATELY

SECTION 2: INSTRUCTIONS TO TENDERERS (ITT)

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A. General

1. Scope of Tender

1.1 **The Executive Engineer, Rajarajeshwarinagara Division, Rajarajeshwarinagara zone, BBMP** (Referred to as Employer in these documents) invites tenders following Two Cover tender procedure, from eligible Tenderers, for the construction of works (as defined in these documents and referred to as " **"Package No. - 3 - RRND - (a) Construction of R.O Plant,Anganawadi Kendra,Samudaya Bhavana in Akkiyappa Garden in Ward No-17 J.P Park (1 Work), (b) Renovation for Samudayabhavana near Ambedkar Colony Ward No-69 Laggere (1 Work) & (c) Renovation and Construction of GMPS School Mallathahalli (1 Work) & Improvemnts and Development of Anganawadi Kendra Old Mallathahalli in Ward-129 Jnanabharathi (1Work) - Total (4 Works) in RR Nagar Division for the year 2023-24."** detailed in the table given in the Invitation for Tenders (IFT). The Tenderers may submit tenders for any or all of the works detailed in the table given in IFT.

2. Eligible Tenderers

2.1 Tenderers shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Government of Karnataka / BBMP

2.2 **Tenders from Joint ventures are not acceptable.**

3. Qualification of the Tenderer:

3.1 All Tenderers shall provide the requested information accurately and in sufficient detail in Section 3: Qualification information.

3.2 To qualify for award of this contract, each Tenderer in its name should have in the last five years (i.e. From 2018-19 to 2022-23)

(a) achieved in at least two financial years a minimum financial turnover (in all classes of civil engineering construction works only) of **Rs. 1500.00 Lakhs** (As per G.O ¸ÀASÉå: ¯ÉÆÃ.E 60 ¹DgïJA 2021, ¢£ÁAPÀ: 08.11.2021)

(b) Satisfactorily completed (at least 50% of the contract value) as prime contractor, at least one similar work value not less than **Rs. 375.00 Lakhs**

(c) Executed in one year (for a continuous period of 12 months) the following minimum quantities of work (As per G.O ¸ÀASÉå: ¯ÉÆÃ.E 630 ¹DgïJA 2014, ¢£ÁAPÀ: 17.11.2014)

Sl No	Particulars	Quantities
1	Earth Work Excavation	2320.00 Cum
2	Concrete (including PCC & RCC)	1500.00 Cum
3	Steel	85.00 Tonne
4	Plastering	4890.00 Sqm
5	Laying of Tiles	1330.00 Sqm
6	Woodwork	40.00 Sqm
7	BBM/SSM/CC Solid Block/Similar Masonry Walls	1350.00 Sqm

(d) The Tenderers or his identified sub-contractor should possess required valid electrical license for executing building electrification works and should have executed similar electrical works totaling Rs..... in any one year;[1] **(DELETED)**

(e) The Tenderers or his identified sub-contractor should possess valid license for executing water supply/sanitary engineering works and should have executed similar water supply/sanitary engineering works totaling Rs..... in any one year;[2] **(DELETED)**

(f) Those who are participated in this tender till the last date of submission the supplier history information wise bid capacity is calculated

3.3 Each Tenderers should further demonstrate:

(a) Availability by owning critical equipment and at least 50% of the required/specified key equipment for this work and the remaining 50% can be deployed on lease/hire basis for all works provided the relevant documents (commitment agreements etc.) for availability for this work are furnished.

Sl No	Machinery	Owned	Hired/ leased	Total Requirement
1	Excavator like JCB/Hitachi etc.,	1	1	2
2	Tippers	4	4	8
3	Concrete Batching Plant	1	0	1
4	Water Tanker	1	2	3
6	Transit Mixers	1	1	2

(b) Liquid assets and /or availability of credit facilities of not less than **Rs. 247.50 Lakhs** (Credit lines/ letter of credit/ certificates from banks for meeting the fund requirement etc.

3.4 To qualify for a package of contracts made up of this and other contracts for which tenders are invited in this IFT, the Tenderer must demonstrate having experience and resources to meet the aggregate of the qualifying criteria for the individual contracts.

3.5 Sub-contractors' experience and resources shall not be taken into account in determining the Tenderer's compliance with the qualifying criteria except to the extent stated in 3.2 (d) and (e) above.

3.6 Tenderers who meet the above specified minimum qualifying criteria, will only be qualified, if their available tender capacity is more than the total tender value. The available tender capacity will be calculated as under:

Assessed available tender capacity = (A*N*1.5 - B)

Where

[1] This is for building works. Appropriately change for other works.
[2] This is for building works. Appropriately change for other works.

A = Maximum value of civil engineering works executed in any one year during the last five years *(updated to* **2022-2023** *price level)* taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the works for which tenders are invited.

B = Value, at **2022-2023** price level, of existing commitments and on-going works to be completed during the next **12 months**

Note: ***The statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Employer in charge, not below the rank of an Executive Engineer or equivalent.***

3.7 Even though the Tenderers meet the above criteria, they are subject to be disqualified if they have:

- made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and/or
- participated in the previous Tender for the same work and had quoted unreasonably high tender prices and could not furnish rational justification.

4. One Tender per Tenderer:

4.1 Each tenderer shall submit only one tender for one package. A tenderer who submits or participates in more than one Tender (other than as a sub-contractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Tenderer's participation to be disqualified.

5. Cost of Tendering:

5.1 The tenderer shall bear all costs associated with the preparation and submission of his tender, and the Employer will in no case be responsible and liable for those costs.

6. Site visit:

6.1 The Tenderer at his own responsibility and risk is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Tender and entering into a contract for construction of the Works. The cost of visiting the Site shall be at the Tenderer's own expense.

B. Tender documents

7. Content of Tender documents

7.1 The set of tender documents shall have all the Sections given in Page 2:

7.2 Both the sets should be completed and returned with the tender.

8. Clarification of Tender Documents

8.1 A prospective tenderer requiring any clarification of the tender documents may notify the Employer in writing or by cable (hereinafter "cable" includes telex and facsimile) at the Employer's address indicated in the invitation to tender. The Employer will respond to any request for clarification which he receives earlier than 15 days prior to the deadline for submission of tenders. Copies of the Employer's response will be forwarded to all purchasers of the tender documents, including a description of the enquiry but without identifying its source.

8.2 **Pre-tender meeting:**

8.2.1 The tenderer or his authorized representative is invited to attend a pre-tender meeting which will take place at **As per e-procurement portal**

8.2.2 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage

8.2.3 The tenderer is requested to submit any questions in writing or by cable to reach the Employer not later than

.

8.2.4 Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be transmitted without delay to all purchasers of the tender documents. Any modification of the tender documents listed in Sub-Clause 7.1 which may become necessary as a result of the pre-tender meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 9 and not through the minutes of the pre-tender meeting.

8.2.5 Non-attendance at the pre-tender meeting will not be a cause for disqualification of a tenderer.

9. Amendment of Tender documents

9.1 Before the deadline for submission of tenders, the Employer may modify the tender documents by issuing addenda.

9.2 Any addendum thus issued shall be part of the tender documents and shall be communicated in writing or by cable to all the purchasers of the tender documents.

9.3 To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their tenders, the Employer shall extend as necessary the deadline for submission of tenders, in accordance with Sub-Clause 16.2 below.

C. Preparation of Tenders

10. Documents comprising the Tender

10.1 The tender submitted by the Tenderer shall be in two covers and shall contain the documents as follows:

10.1.1 First Cover:

(a) Earnest Money Deposit;

(b) Qualification Information as per formats given in Section 3;

10.1.2 Second Cover:

(a) The Tender (in the format indicated in Section 4)

(b) Priced Bill of Quantities (Section 9);

And any other materials required be completing and submitting by Tenderers in accordance with these instructions. The documents listed under Sections 3, 4, 6 and 9 shall be filled in without exception.

10.2 Tenderers submitting tenders together with other contracts stated in the IFT to form a package will so indicate in the tender together with any discounts offered for the award of more than one contract.

11. Tender prices

11.1 The contract shall be for the whole works as described in Sub-Clause 1.1, based on the priced Bill of Quantities submitted by the Tenderer.

11.2 The Tenderer shall fill in rates and prices and line-item total (both in figures and words) for all items of the Works described in the Bill of Quantities along with total tender price (both in figures and words). **Items for which no rate or price is entered by the Tenderer will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities**. Corrections, if any, shall be made by crossing out, initialing, dating and rewriting.

11.3 All duties, taxes, and other levies payable by the contractor under the contract, or for any other cause, shall be included in the rates, prices and total Tender Price submitted by the Tenderer.

11.4 The rates and prices quoted by the Tenderer shall be subject to adjustment during the performance of the Contract in accordance with the provisions of Clause of the Conditions of Contract

12. Tender validity

12.1 Tenders shall remain valid for a period not less than **Ninety (90) days** after the deadline date for tender submission specified in Clause 16. A tender valid for a shorter period shall be rejected by the Employer as non-responsive.

12.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the Tenderers may extend the period of validity for a specified additional period. The request and the Tenderers' responses shall be made in writing or by cable. A Tenderer may refuse the request without forfeiting his earnest money deposit. A Tenderer agreeing to the request will not be required or permitted to modify his tender, but will be required to extend the validity of his earnest money deposit for a period of the extension, and in compliance with Clause 13 in all respects.

13. Earnest money deposit

13.1 The Tenderer shall furnish, as part of his tender, earnest money deposit (EMD) at the following rates

a) upto Rs.20 Lakhs - 2.5%
b) Rs.20 Lakhs and above upto Rs. 1 crore – 2% subject to a minimum of Rs. 50,000/-
c) Rs.1 crore and above upto Rs.10 crores – 1.5% subject to a minimum of Rs. 2,00,000/-
d) Rs.10 crores and above – 1% subject to a minimum of Rs.15,00,000/-.

e) Fixed Deposit Receipt (FDR) subject to the following condition

- Maturity date of FDRs issued by the Bank should be beyond the date expected date of finalization of the tender.

Earnest money deposit will have to be in any one of the forms as specified in the Tender document and as per circular PWD:15:ITC:2008/2009 Dated:02-12-2010 (Minimum Rs. 1,00,000/- through e-payment under of the following i.e., online / RTGS / NEFT / OTC and **the balance by bank guarantee/FDR issued by Nationalized/Scheduled Bank** and shall have to be valid for 90 days beyond the validity of the tender.

As per Circular: PWD: 15: ITC: 2008/2009 Dated:02-12-2010 the Tenderer shall submit the ORIGINAL BG/FDR for Part EMD on or before the Opening of Technical Bid date of E-procurement portal if failed to submit, the bid will be rejected and the initial amount deposited through e-procurement will be forfeited and further their names will be proposed for Black Listing if resorted repeatedly.

13.2 Instruments having fixed validity issued as earnest money deposit for the tender shall be valid for 45 days **beyond** the validity of the tender.5

13.3 Any tender not accompanied by an acceptable earnest money deposit and not secured as indicated in Sub-Clauses 13.1 and 13.2 above shall be rejected by the Employer as non-responsive.

13.4 The earnest money deposit of unsuccessful Tenderers will be returned within 30 days of the end of the tender validity period specified in Sub-Clause 12.1.

13.5 The earnest money deposit of the successful Tenderer will be discharged when the Tenderer has signed the Agreement and furnished the required Performance Security.

13.6 The earnest money deposit may be forfeited:

(a) if the Tenderer withdraws the Tender after tender opening during the period of tender validity;
(b) if the Tenderer does not accept the correction of the Tender Price, pursuant to Clause 24; or
(c) in the case of a successful Tenderer, if the Tenderer fails within the specified time limit to
  (i) Sign the Agreement; or
  (ii) Furnish the required Security deposit

14. Format and signing of Tender

14.1 The Tenderer shall prepare one original and a copy of the documents comprising the Tender as described in Clause 10 of these *Instructions to Tenderers*, and clearly marked "**ORIGINAL**" and "**COPY"** as appropriate. In the event of discrepancy between them, the original shall prevail.

14.2 The original and a copy of the Tender shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Tenderer. All pages of the tender where entries or amendments have been made shall be initialed by the person signing the tender

14.3 The Tender shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the Tenderer, in which case such corrections shall be initialed by the person signing the Tender.

D. Submission of Tenders

15. Sealing and marking of tenders

15.1 The Tenderer shall seal the original and a copy of the Tender in separate envelopes, duly marking the envelopes as "**ORIGINAL**" and "**COPY**". These envelopes (called as inner envelopes) shall then be put inside one outer envelope.

15.2 The **inner and outer** envelopes shall

(a) be addressed to the Employer at the following address:

Office of the Executive Engineer
Rajarajeshwarinagara Division, Rajarajeshwarinagara zone
Near Chowdeshwari Bus Stand,
Mathikere Bangalore – 560 054

(insert address of office for Tender submission), and

(b) bear the following identification:
- Tender for .....[name of contract]
- Tender Reference No.....[insert number]
- DO NOT OPEN BEFORE.....[time and date for tender opening, per Clause 19]

15.3 In addition to the identification required in Sub-Clause 15.2, the inner envelopes shall indicate the name and address of the Tenderer to enable the tender to be returned unopened in case it is declared late, pursuant to Clause 17.

15.4 If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the Tender.

Note:-

1. The Tenderer shall access Tender Documents, fill them and submit the Completed Tender Document as stated in Clause 10 through Website of KPP Portal itself (https://kppp.karnataka.gov.in/). The Signed, Sealed and Scanned Copy of all the Documents as stated in Clause 10 shall be attached to the e – Tender Document, failing which the Bid will not be considered. It is the Responsibility of the Tenderer to submit all the Documents pertaining to Eligibility Criteria / Qualification Information with due diligence. All the Pages of the Document shall be serially numbered with an Index for ready reference.

2. No Physical Documents shall be considered. However, all the participating Tenderers shall produce all the Original Documents for Verification whenever asked by the Employer.

16. Deadline for submission of the Tenders

16.1 Tenders must be received by the Employer at the address specified above no later than **As per KPP portal** In the event of the specified date for the submission of tenders being declared a holiday for the Employer, the tenders will be received up to the appointed time on the next working day.

16.2 The Employer may extend the deadline for submission of tenders by issuing an amendment in accordance with Clause 9, in which case all rights and obligations of the Employer and the Tenderers previously subject to the original deadline will then be subject to the new deadline.

17. Late Tenders

17.1 Any Tender received by the Employer after the deadline prescribed in Clause 16 will be returned unopened to the Tenderer.

18. Modification and Withdrawal of Tenders

18.1 Tenderers may modify contents of First or Second Covers separately for each Cover or withdraw their Tenders by giving notice in writing before the deadline prescribed in Clause 16.

18.2 Each Tenderer's modification separately for each Cover or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with Clause 14 & 15, with the outer and inner envelopes additionally marked "**MODIFICATION FOR FIRST/SECOND COVER**" or "**WITHDRAWAL**", as appropriate.

18.3 No Tender may be modified after the deadline for submission of Tenders.

18.4 Withdrawal or modification of a Tender between the deadline for submission of Tenders and the expiration of the original period of Tender validity specified in Clause 12.1 above or as extended pursuant to Clause 12.2 may result in the forfeiture of the earnest money deposit pursuant to Clause 13.

1 8.5 Tenderers may only offer discounts to, or otherwise modify the prices of their Tenders by submitting Tender modifications in accordance with this clause, or included in the original Tender submission.

E. Tender opening and evaluation

19. Opening of First Cover of all Tenders and evaluation to determine qualified Tenderers:

19.1 The Employer will open the First Covers of all the Tenders received (except those received late or withdrawn), including modifications for First Cover made pursuant to Clause 18, in the presence of the Tenderers or their representatives who choose to attend **on As per KPP portal on** the date and the place specified in Clause 16. In the event of the specified date of Tender opening being declared a holiday for the Employer, the Tenders will be opened at the appointed time and location on the next working day.

19.2 Envelopes marked "**WITHDRAWAL**" shall be opened and read out first. The First Cover of Tenders for which an acceptable notice of withdrawal has been submitted pursuant to Clause 18 shall not be opened.

19.3 The Tenderers names, the presence or absence of earnest money deposit (amount, format and validity), the submission of qualification information and such other information as the Employer may consider appropriate will be announced by the Employer at the opening. Late and withdrawn Tenders will be returned unopened to tenders.

19.4 The Employer shall prepare minutes of the Tender opening, including the information disclosed to those present in accordance with Sub-Clause 19.3.

19.5 The Second Cover of all the Tenderers including modifications for Second Cover shall be placed in a large cover and securely sealed in the presence of the tenderers or their representatives, who are present and also get the same signed by all those tenderers or their representatives. The large cover shall be kept in safe custody by the Employer.[3]

19.6 The Employer will evaluate and determine whether each tender (a) meets the eligibility criteria defined in ITT Clause 2; (b) is accompanied by the required earnest money deposit as per stipulations in ITT Clause and (c) meets the minimum qualification criteria stipulated in ITT Clause 3. The Employer will draw out a list of qualified Tenderers.[4]

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[3] Refer GOK circular No. PWD 1359 SO/FC 2001 (P-2) dated 30th June 2003.

[4] The evaluation of the technical aspects contained in the first cover should be completed within a reasonable period and the time gap between the opening of the first and second cover should be the minimum and, in any case, not more than 45 days {In exceptional cases, approval of the Secretary to the Government of the concerned Department/Managing Director of the Corporation shall be obtained, where the period is more than 45 days but less than 60 days. If it exceeds 60 days the tenders shall be reinvited.

20.1 The Employer will inform all the Qualified Tenderers the time, date and venue fixed for the opening of the Second Cover containing the priced Tenders. The Employer will open the Second Covers of Qualified Tenderers at the appointed time and date in the presence of the Tenders or their representatives who choose to attend. In the event of the specified date of Second Cover opening being declared a holiday for the Employer, the Second Covers will be opened at the appointed time and location on the next working day.

20.2 Envelopes marked **"MODIFICATION FOR SECOND COVER"** shall be opened and the submissions therein read out in appropriate detail.

20.3 The Tenderers' names, the Tender prices, the total amount of each Tender, any discounts, Tender modifications and withdrawals, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening. No Tender shall be rejected at Tender opening.

20.4 The Employer shall prepare minutes of the Second Cover Tender opening, including the information disclosed to those present in accordance with Sub-Clause 20.3.

21. Process to be confidential

21.1 Information relating to the examination, clarification, evaluation, and comparison of Tenders and recommendations for the award of a contract shall not be disclosed to Tenderers or any other persons not officially concerned with such process until the award to the successful Tenderer has been announced. Any effort by a Tenderer to influence the Employer's processing of Tenders or award decisions may result in the rejection of his Tender.

22 Clarification of Tenders

22.1 To assist in the examination, evaluation, and comparison of Tenders, the Employer may, at his discretion, ask any Tenderer for clarification of his Tender, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the Tender shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Tenders in accordance with Clause 24.

22.2 Subject to sub-clause 22.1, no Tenderer shall contact the Employer on any matter relating to its Tender from the time of the Tender opening to the time the contract is awarded. If the Tenderer wishes to bring additional information to the notice of the Employer, it should do so in writing.

22.3 Any effort by the Tenderer to influence the Employer in the Employer's Tender evaluation, Tender comparison or contract award decisions may result in the rejection of the Tenderers' Tender.

23. Examination of Tenders and determination of responsiveness

23.1 Prior to the detailed evaluation of Tenders, the Employer will determine whether each Tender; (a) has been properly signed; and; (b) is substantially responsive to the requirements of the Tender documents.

23.2 A substantially responsive Tender is one which conforms to all the terms, conditions, and specifications of the Tender documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the Tender documents, the Employer's rights or the Tenderer's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Tenderers presenting substantially responsive Tenders.

23.3 If a Tender is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

24. Correction of errors

24.1 Tenders determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:

(a) where there is a discrepancy between the rates in figures and in words, the lower of the two will govern[5]; and

(b) where there is a discrepancy between the unit rate and the line-item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.

[5] Clause 25(2) of Chapter VI of KTPP Rules 2000 states that "in case of discrepancy between the price quoted in words and figures, the lower of the two shall be considered".

24.2 The amount stated in the Tender will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Tenderer, shall be considered as binding upon the Tenderer. If the Tenderer does not accept the corrected amount the Tender will be rejected, and the earnest money deposit may be forfeited in accordance with Sub-Clause 13.6 (b).

25. Evaluation and comparison of Tenders

25.1 The Employer will evaluate and compare only the Tenders determined to be substantially responsive in accordance with Clause 23.

25.2 In evaluating the Tenders, the Employer will determine for each Tender the evaluated Tender Price by adjusting the Tender Price as follows:
(a) making any correction for errors pursuant to Clause 24; and
(b) making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub Clause 18.5.

25.3 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Tender documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Tender evaluation.

25.4 The estimated effect of the price adjustment conditions under Clause 41 of the Conditions of Contract, during the implementation of the Contract, will not be taken into account in tender Evaluation

25.5 If the tender of the successful tenderer is seriously unbalanced in relation to the Employer’s estimate of the cost of the work to be performed under the contract, the Employer may require the Tenderer to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set forth in Clause 29 be increased at the expense of the successful Tenderer to a level sufficient to protect the Employer against financial loss in the event of default of the successful under the contract.

F. Award of Contract

26. Award criteria

26.1 Subject to Clause 27, the Employer will award the Contract to the Tenderer whose Tender has been determined to be substantially responsive to the Tender documents and who has offered the lowest evaluated Tender Price, provided that such Tenderer has been determined to be (a) eligible in accordance with the provisions of Clause 2, and (b) qualified in accordance with the provisions of Clause 3.

27. Employer's right to accept any Tender and to reject any or all Tenders

27.1 Notwithstanding Clause 26, the Employer reserves the right to accept or reject any Tender, and to cancel the Tender process and reject all Tenders, at any time prior to the award of Contract, without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Tenderer or Tenderers of the grounds for the Employer's action.

28. Notification of award and signing of Agreement

28.1 The Tenderer whose Tender has been accepted will be notified of the award by the Employer prior to expiration of the Tender validity period by cable, telex, e-mail or facsimile confirmed by registered letter. This letter (hereinafter and in the *Conditions of Contract* called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").

28.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of Security deposit in accordance with the provisions of Clause 29.

28.3 The Agreement will incorporate all agreements between the Employer and the successful Tenderer. It will be kept ready for signature of the successful Tenderer in the office of Employer within 30 days following the notification of award along with the Letter of Acceptance. Within 20 days of receipt, the successful Tenderer will sign the Agreement and deliver it to the Employer.

28.4 Upon the furnishing by the successful Tenderer of the Performance Security, the Employer will promptly notify the other Tenderers that their Tenders have been unsuccessful.

29. Security deposit

29.1 Within 20 days of receipt of the Letter of Acceptance, the successful Tenderer shall deliver to the Employer a Security deposit in any of the forms given below for an amount equivalent to 5% of the Contract price plus additional security for unbalanced tenders in accordance with Clause 25.5 of ITT and Clause 44 of the Conditions of Contract for all works. :

- ~~Cash or~~
- Banker's cheque/Demand draft,/Pay Order in favour of Commissioner BBMP payable at Bangalore or
- **A Bank Guarantee in the form given in Section 10; or**
- **Special Small savings instruments pledged to Executive Engineer – Rajarajeshwarinagara Division, BBMP**

29.2 If the security deposit is provided by the successful Tenderer in the form of a Bank Guarantee, it shall be issued either by a Nationalized/Scheduled bank.

29.3 The security deposit if furnished in ~~cash or~~ demand draft can, if requested, be converted to interest bearing securities at the cost of the contractor.

29.4 Failure of the successful Tenderer to comply with the requirements of Sub-Clause 29.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Earnest money deposit.

30 Advance Payment and Security:

31. Corrupt or Fraudulent practices

31.1 The BBMP requires that the Tenderers/Suppliers/Contractors, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, BBMP:

(a) will reject a proposal for award if it determines that the Tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;

(b) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a BBMP contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a BBMP contract.

31.2 Furthermore, Tenderers shall be aware of the provision stated in sub-clause 50.2 of the Conditions of Contract.

SECTION 3: QUALIFICATION INFORMATION

The information to be filled in by the Tenderer hereunder will be used for purposes of computing Tender capacity as provided for in Clause 3 of the Instructions to Tenderers. This information will not be incorporated in the Contract.

1.1 Constitution or legal status of Tenderer [Attach copy]

Place of Registration _____ (Attach Copy)

Principal place of business: _____

1.2 Total value of civil engineering construction works executed and payments received in the last five years (in Rs. Lakhs) Attach Certificate from Chartered Accountant

2018 - 19 .....
2019 - 20 .....
2020 - 21 .....
2021 - 22 .....
2022 - 23 .....

1.3 Work performed as Prime Contractor (in the same name) on works of similar nature over during the five years specified in 1.2 above.

Project Name	Name of Employer	Descrip-tion of Work	Contract Number	Value of Contract Rs. Lakhs	Date of issue of work order	Specified period of completion	Actual date of Actual date of	Remarks explaining reasons for delay in completion of work
1	2	3	4	5	6	7	8	9

1.4 Quantities of work executed as prime contractor (in the same name) during the last five years specified in 1.2 above:

Year	Name of Work	Name of Employer	Quantity of work performed (cum)[6]			Remarks (Indicate contract reference)
			Cement Concrete	Masonry	Earthworks	
2018-19						
2019-20						
2020-21						
2021-22						
2022-23						

1.5 Information on works for which Tenders have been submitted and works which are yet to be completed as on the date of this Tender.

(A) Existing commitments and on-going works:

Description of Work	Place & State	Contract No. & Date	Name And Address of	Value of Contract (Rs. lakhs)	Stipulated period of completion	Value of works remaining to be completed (Rs. lakhs)	Anticipated date of completion

[6] Items of work for which data is requested should tally with that specified in ITT Clause 3

			Employer			Attach Certificates from Engineers –in-Charge	
1	2	3	4	5	6	7	8

(B) Works for which Tenders already submitted:

Description of Work	Place & State	Name and Address of Employer	Estimated value of works (Rs. lakhs)	Stipulated period of completion	Date when decision is expected	Remarks if any
1	2	3	4	5	6	7

1.6. The following items of equipment are considered essential for successfully carrying out the works. The Tenderer should furnish all the information listed below.

Item of Equipment	Requirement[7]		Owned	Owned and available		
	No.	Capacity		Number/ Capacity	Age/ condition	Remarks

1.7 Reports on the financial standing of the tenderer, such as profit and loss statements and auditor's reports for the last five years;

1.8 Qualification and experience of the key technical and management personnel in permanent employment with the tenderer and those that are proposed to be deployed on this contract, if awarded.

1.9. Name, address, and telephone, telex, and fax numbers of the Tenderers' bankers who may provide references if contacted by the Employer.

1.10 Evidence of access to financial resources to meet the qualification requirement specified in ITT Clause3.3 (b): ~~Cash~~ in hand, Letter of Credit etc. List them below and attach certificate from the Banker in the suggested format as under:

[7] The item of equipment, required number and capacity should match with those specified in ITT Clause 3.3 (a)

BANKER'S CERTIFICATE

This is to certify that M/s. ..... is a reputed company with a good financial standing. If the contract for this work, namely ..... (*name of the work)* is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs. ..... to meet the working capital requirements for executing the above contract

Name of the Bank, Senior Bank Manger with Signature
Address:.....

1.11 ~~Proposals for subcontracting components of works amounting to more than 20% of the contract price.~~

Item of Work	Value of Sub-Contract	Identified Sub-Contractor (Name and address)	Experience of similar work (Attach certificates from the respective Employers.)
1	2	3	4

1.12 Information on litigations in which the Tenderer is involved:

Other Party (ies)	Employer	Details of dispute	Amount involved	Remarks showing present status

1.13 The proposed methodology and program of construction, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones.

SECTION 4: FORMS OF TENDER, LETTER OF ACEPTANCE, NOTICE TO PROCEED WITH THE WORK AND AGREEMENT FORM

Form of Tender

Description of the Works: .....
.....
(To be filled in by the Employer before issue of the Tender document)

Tender

To : .....

Address .....
.....
(To be filled in by the Employer before issue of the Tender document)

GENTLEMEN,

We offer to execute the Works described above in accordance with the Conditions of Contract accompanying this Tender for the Contract Price of ..... *[in figures] (*.....) *[in letters]*.[8]

This Tender and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any Tender you receive.

The advance payment required is Rs.....

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

We hereby confirm that this Tender complies with the Tender validity and Earnest money deposit required by the Tender documents.

We attach herewith our current income-tax clearance certificate.

Yours faithfully,

Authorized Signature:

Name & Title of Signatory: _____

Name of Tenderer _ Executive Engineer

[8] To be filled in by the Tenderer, together with his particulars and date of submission at the bottom of the Form of Tender

Address: Office of the Rajarajeshwarinagara Division, Rajarajeshwarinagara zone, Near Chowdeshwari Bus Stand, Mathikere, Bangalore-560073

Letter of Acceptance

(letterhead paper of the Employer)

.....[date]

To:

.....

.....[name and address of the Contractor]

Dear Sirs,

This is to notify you that your Tender dated ..... for execution of the .... *[name of the contract and identification number, as given in the Instructions to Tenderers]* for the Contract Price of Rupees .... (.....) [amount in words and figures], as corrected and modified in accordance with the Instructions to Tenderers is hereby accepted by our Agency.

You are hereby requested to furnish Security deposit plus additional security for unbalanced tenders in terms of Clause 25.5 of ITT, in the form detailed in Clause 29.1 of ITT for an amount of Rs..... within 20 days of the receipt of this letter of acceptance valid up to 30 days from the date of expiry of Defects Liability Period i.e. up to ..... and sign the contract, failing which action as stated in Para 29.4 of ITT will be taken.

Yours faithfully,

Authorized Signature

Name and Title of Signatory

Name of Agency

Issue of Notice to proceed with the work

(letterhead of the Employer)

.....(date)

To

.....

.....

..... (name and address of the Contractor)

Dear Sirs:

Pursuant to your furnishing the requisite security deposit as stipulated in ITT Clause 29.1 and signing of the contract agreement for the construction of …… (name of the work) a Tender Price of Rs…… , you are hereby instructed to proceed with the execution of the said works in accordance with the contract documents.

Yours faithfully,

(Signature, name and title of signatory
authorized to sign on behalf of Employer)

Agreement Form

Agreement

This agreement, made the ……day of ……20……., between……

Executive Engineer Rajarajeshwarinagara Division, Rajarajeshwarinagara zone, B.B.M.P Bengaluru-560073.

[Name and address of Employer]

(Hereinafter called "the Employer") of the one part and

…… [Name and address of contractor] (Hereinafter called "the Contractor") of the other part.

Whereas the Employer is desirous that the Contractor execute

…… [Name and identification number of Contract] (Hereinafter called "the Works") and the Employer has accepted the Tender by the Contractor for the execution and completion of such Works and the remedying of any defects therein at a contract price of Rupees……

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:
   i) Letter of Acceptance;
   ii) Notice to proceed with the works;
   iii) Contractor's Tender;
   iv) Contract Data;

v) Conditions of contract (including Special Conditions of Contract);
vi) Specifications;
vii) Drawings;
viii) Bill of Quantities; and
ix) Any other document listed in the Contract Data as forming part of the contract.

In witness whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The Common Seal of .....
Signed, Sealed and Delivered by the said
.....
.....
in the presence of:
Binding Signature of Employer
.....
Binding Signature of Contractor
.....

SECTION 5: CONDITIONS OF CONTRACT

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Conditions of Contract

A. General

1. Definitions

1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Bold letters are used to identify defined terms.

Bill of Quantities means the priced and completed Bill of Quantities forming part of the Tender.
Compensation events are those defined in Clause 38 hereunder.
The **Completion Date** is the date of completion of the Works as certified by the Employer in accordance with Sub Clause 46.1.
The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.2 below.
The **Contract Data** defines the documents and other information which comprise the Contract.
The **Contractor** is a person or corporate body who's Tender to carry out the Works has been accepted by the Employer.
The **Contractor's Tender** is the completed Tender document submitted by the Contractor to the Employer.
The **Contract price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.
Days are calendar days; **months** are calendar months.
A **Defect** is any part of the Works not completed in accordance with the Contract.
The **Defects liability period** is the period named in the Contract Data and calculated from the Completion Date.
The **Employer** is the party who will employ the Contractor to carry out the Works.

Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
The **Initial Contract price** is the Contract Price listed in the Employer's Letter of Acceptance.
The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Employer by issuing an extension of time.
Materials are all supplies, including consumables, used by the contractor for incorporation in the Works.
Plant is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.
The **Site** is the area defined as such in the Contract Data.
Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Employer.
The **Start Date** is given in the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates.
A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes work on the Site.
A **Variation** is an instruction given by the Employer which varies the Works.
The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data.

2. Interpretation

2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Employer will provide instructions clarifying queries about the Conditions of Contract.

2.2 The documents forming the Contract shall be interpreted in the following order of priority:

(1) Agreement
(2) Letter of Acceptance, notice to proceed with the works
(3) Contractor’s Tender
(4) Contract Data
(5) Conditions of Contract
(6) Specifications
(7) Drawings
(8) Bill of quantities and
(9) Any other document listed in the Contract Data as forming part of the Contract.

3. Law governing contract

3.1 The law governing the Contract is the Laws of India supplanted by the Karnataka Local Acts.

4. Employer's decisions

4.1 Except where otherwise specifically stated, the Employer will decide contractual matters between the Employer and the Contractor.

5. Delegation

5.1 The Employer may delegate any of his duties and responsibilities to other people after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications

6.1 Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

7. Subcontracting (Deleted)

7.1 Deleted.

8. Other Contractors

8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer.

9. Personnel

9.1 The Contractor shall employ the technical personnel (of number and qualifications) as may be stipulated by GOK from time to time during the execution of the work. The technical staff so employed shall be available at site as may be stipulated by the Employer.

9.2 If the Employer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's risks

10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's risks

11.1 The Employer is responsible for the excepted risks which are:

(a) rebellion, riot commotion or disorder unless solely restricted to employees of the Contractor or his Sub-Contractors arising from the conduct of the Works; or

(b) a cause due solely to the design of the Works, other than the Contractor's design; or

(c) any operation of the forces of nature (in so far as it occurs on the Site) which an experienced contractor:

- (i) could not have reasonably foreseen; or
- (ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures;
  - (A) prevent loss or damage to physical property from occurring by taking appropriate measures or
  - (B) insure against such loss or damage

12. Contractor's risks

12.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

13. Insurance:

13.1 The Contractor shall prior to commencing the works, effect and thereafter maintain insurances, in the joint names of the Employer and the Contractor, (cover from the first working day after the Start Date to the end of Defects Liability Period), in the amounts stated in the Contract Data :

(a) for loss of or damage to the Works, Plants and Materials and the Contractor's equipment;

(b) for liability of both Parties for loss, damage, death and injury to third parties or their property arising out of the Contractor's performance of the Contract including the Contractor's liability for damage to the Employer's property other than the Works and

(c) for liability of both Parties and of any Employer's representative for death and injury to the Contractor's personnel except to the extent that liability arises from the negligence of the Employer, any Employer's representative or their Employees.

13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Employer for his approval before the Start Date. All such insurance shall provide for compensation to be payable to rectify the loss or damage incurred. All payments received from insurers relating to loss or damage shall be held jointly by the Parties and used for the repair of the loss or damage or as compensation for loss or damage that is not to be repaired.

13.3 If the Contractor fails to effect or keep in force any of the insurances referred to in the previous sub-clauses or fails to provide satisfactory evidence, policies or receipts, the Employer

may without prejudice to any other right or remedy, effect insurance for the cover relevant to such default and pay the premiums due and recover the same as a deduction from any other monies due to the Contractor. If no payments is due, the payment of the premiums shall be a debt due.

13.4 Alterations to the terms of an insurance shall not be made without the approval of the Employer.

13.5 Both Parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports:

14.1 The Contractor, in preparing the tender, shall rely on any site investigation reports referred to in the Contract data, supplemented by any information available to the Tenderer.

15. Queries about the Contract Data

15.1 The Employer will clarify queries on the Contract Data.

16. Contractor to construct the Works

16.1 The Contractor shall construct the Works in accordance with the Specification and Drawings.

17. The Works to be completed by the Intended Completion Date

17.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Contractor, as updated with the approval of the Employer, and complete them by the Intended Completion Date.

18. Approval by the Employer:

18.1 The Contractor shall submit Specification and drawings showing the proposed Temporary Works to the Employer, who is to approve them if they comply with the Specifications and Drawings.

18.2 The Contractor shall be responsible for the design of Temporary Works

18.3 The Employer’s approval shall not alter the Contractor’s responsibility for design of the Temporary Works.

18.4 The Contractor shall obtain approval of third parties to the design of third parties to the design of the temporary Works where required.

18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Employer before their use.

19. Safety

19.1 The Contractor shall be responsible for the safety of all activities on the Site.

20. Discoveries

20.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Employer of such discoveries and carry out the Employer's instructions for dealing with them.

21. Possession of the Site

21.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

22. Access to the Site

22.1 The Contractor shall allow the Employer and any person authorized by the Employer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

23. Instructions

23.1 The Contractor shall carry out all instructions of the Employer which comply with the applicable laws where the Site is located.

24. Procedure for resolution of Disputes:

24.1 If the Contractor is not satisfied with the decision taken by the Employer, the dispute shall be referred by either party to Arbitration within 30 days of the notification of the Employer's decision.

24.2 If neither party refers the dispute to Arbitration within the above 30 days, the Employer's decision will be final and binding.

24.3 The Arbitration shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract.

B. Time Control

25. Program

25.1 Within the time stated in the Contract Data the Contractor shall submit to the Employer for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works.

25.2 The Employer's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Employer again at any time. A revised Program is to show the effect of Variations and Compensation Events.

26. Extension of the Intended Completion Date

26.1 The Employer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date.

26.2 The Employer shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Employer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information.

27. Delays ordered by the Employer

27.1 The Employer may instruct the Contractor to delay the start or progress of any activity within the Works.

28. Management meetings

28.1 The Employer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the progress achieved and the plans for remaining work.

28.2 The responsibility of the parties for actions to be taken is to be decided by the Employer either at the management meeting or after the management meeting and stated in writing to be distributed to all who attended the meeting.

C. Quality Control

29. Identifying defects

29.1 The Employer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Employer may instruct the Contractor to search for a Defect and to uncover and test any work that the Employer considers may have a Defect

30. Tests

30.1 If the Employer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.

31. Correction of defects

31.1 The Employer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

31.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Employer's notice.

32. Uncorrected defects

32.1 If the Contractor has not corrected a Defect within the time specified in the Employer's notice, the Employer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

COST CONTROL

33. Bill of Quantities (BOQ)

33.1 The BOQ shall contain items for the construction, installation, testing, and commissioning work to be done by the Contractor.

33.2 The BOQ is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the BOQ for each item

34. Variations

34.1 The Employer shall have power to order the Contractor to do any or all of the following as considered necessary or advisable during the progress of the work by him

(a) Increase or decrease of any item of work included in the Bill of Quantities (BOQ);
(b) Omit any item of work;
(c) Change the character or quality or kind of any item of work;
(d) Change the levels, lines, positions and dimensions of any part of the work;
(e) Execute additional items of work of any kind necessary for the completion of the works; and
(f) Change in any specified sequence, methods or timing of construction of any part of the work.

34.2 The Contractor shall be bound to carry out the work in accordance with any instructions in this connection, which may be given to him in writing by the Employer and such alteration shall not vitiate or invalidate the contract.

34.3 Variations shall not be made by the Contractor without an order in writing by the Employer, provided that no order in writing shall be required for increase or decrease in the quantity of an item appearing in the BOQ so long as the work executed conforms to the approved drawings.

34.4 The Contractor shall promptly request in writing to the Employer to confirm verbal orders and the officer issuing oral instructions shall confirm it in writing within 30 days, failing which the work shall be carried out as though there is no variation. In case variation is approved it shall be accompanied by BOQ, failing which the contractor shall be responsible for deviation if any. Further, approval of Govt. / BBMP has to be obtained for the variation exceeding 5%.

35. Payments for Variations

35.1 Payment for increase in the quantities of an item in the BOQ up to 25% of that provided in the Bill of Quantities shall be made at the rates quoted by the Contractor.

35.2 For quantities in excess of 125% of the tendered quantity of an item as given in the BOQ, the Contractor shall be paid at the rate entered in or derived from in the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) plus or minus the overall percentage of the original tendered rates over the current Schedule of Rates prevalent at the time of award of contract.

35.3 If there is no rate for the additional, substituted or altered item of the work in the BOQ, efforts would be made to derive the rates from those given in the BOQ or the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) and if found feasible the payment would be made at the derived rate for the item plus or minus the overall percentage of the original tendered rates over the current Schedule of Rates prevalent at the time of award of contract

35.4 If the rates for additional, substituted or altered item of work cannot be determined either as at 35.1 or 35.2 or 35.3 above, the Contractor shall be requested to submit his quotation for the items supported by analysis of the rate or rates claimed, within 7 days.

35.5 If the Contractor's quotation is determined unreasonable, the Employer may order the Variation and make a change to the Contract Price which shall be based on Employer’s own forecast of the effects of the Variation on the Contractor's costs.

35.6 If the Employer decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.

35.7 Under no circumstances the Contractor shall suspend the work on the plea of non-settlement of rates for items falling under this Clause.

36. Submission of bills for payment

36.1 The Contractor shall submit to the Employer monthly bills of the value of the work completed less the cumulative amount paid previously.

36.2 The Employer shall check the Contractor's bill and determine the value of the work executed which shall comprise of (i) value of the quantities of the items in the BOQ completed and (ii) valuation of Variations and Compensation Events.

36.3 The Employer may exclude any item paid in a previous bill or reduce the proportion of any item previously paid in the light of later information.

37. Payments

37.1 Payments shall be adjusted for deductions for advance payments other than recoveries in terms of contract and taxes, at source, as applicable under the law. The Employer shall pay the Contractor the within 60 days of submission of bill. The contractor shall be liable to pay liquidated damages for shortfall in progress. For progress beyond the agreed programme payment is subject to availability of the grants.

37.2 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

38. Compensation events

38.1 The following are Compensation events unless they are caused by the Contractor:

(a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.
(b) The Employer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.
(c) The Employer instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.
(d) The Employer gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
(e) The effect on the Contractor of any of the Employer’s Risks.
(f) The Employer unreasonably delays issuing a Certificate of Completion.
(g) Other Compensation Events listed in the Contract Data or mentioned in the Contract.

38.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Employer shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

38.3 As soon as information demonstrating the effect of each Compensation event upon the Contractor's forecast cost has been provided by the Contractor, it is to be assessed by the Employer and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Employer shall adjust the Contract Price based on Employer’s own forecast. The Employer will assume that the Contractor will react competently and promptly to the event.

38.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Employer.

39. Tax

39.1 The rates quoted by the Contractor shall be deemed to be exclusive of GST and inclusive of other taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

40. Price Adjustment:

~~**(As per the G.O. No.FD 3 PCL 2008, Bangalore, Dated: 21.11.2008)**~~

~~If the period of execution is more than 6 months but less than or equal to 12 months for work costing more than Rs.50 lakhs, star rates in respect of specified materials (cement, steel and bitumen) only shall be payable to the contractor based on the all-India average wholesale price index for the said materials. The star rates adjustment shall be as per the increase or decrease in the index as applied to the said materials between the last date for receiving bids and the date of execution as per the approved programme of works submitted by the contractor at the time of execution of agreement which shall mandatorily be a part of the agreement.~~

40.1 Deleted

40.2 Deleted

41. Liquidated damages

41.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the Contract Data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.

41.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Employer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment of bill.

42. Advance Payments: Refer Section 6: Contract Data

43. Securities:

43.1 The Security deposit (including additional security for unbalanced tenders) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and type of instrument acceptable to the Employer. The Security deposit shall be valid until a date 30 days from the date of expiry of Defects Liability Period and the additional security for unbalanced tenders shall be valid until a date 30 days from the date of issue of the certificate of completion.

44. Cost of Repairs:

44.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

45. Completion

45.1 The Contractor shall request the Employer to issue a Certificate of Completion of the Works and the Employer will do so upon deciding that the Work is completed.

46. Taking over

46.1 The Employer shall take over the Site and the Works within seven days of issuing a certificate of Completion.

47. Final account

47.1 The Contractor shall supply to the Employer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Employer shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 90 days of receiving the Contractor's account if it is correct and complete. If it is not, the Employer shall issue within 90 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Employer shall decide on the amount payable to the Contractor and make payment within 60 days of receiving the Contractor's revised account.

48. As built drawings and /or Operating and Maintenance Manuals

48.1 If "as built" (*Completion drawings*) Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.

48.2 If the Contractor does not supply the Drawings by the dates stated in the Contract Data, or they do not receive the Employer's approval, the Employer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

49. Termination

49.1 The Employer may terminate the Contract if the other party causes a fundamental breach of the Contract.

49.2 Fundamental breaches of Contract include, but shall not be limited to the following:

(a) The Contractor stops work for 45 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Employer;

(b) Deleted.

(c) The Contractor becomes bankrupt or goes into liquidation other than for a reconstruction or amalgamation;

(d) Deleted.

(e) the Employer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Employer;

(f) The Contractor does not maintain a security which is required;

(g) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and

(h) If the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract.
For the purpose of this paragraph : "corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition."

49.3 When either party to the Contract gives notice of a breach of contract to the Employer for a cause other than those listed under Sub Clause 49.2 above, the Employer shall decide whether the breach is fundamental or not.

49.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.

49.5 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

50. Payment upon Termination

50.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Employer shall prepare bill for the value of the work done less advance payments received up to the date of the bill, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.

50.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Employer shall prepare bill for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed

solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract, and less taxes due to be deducted at source as per applicable law and make payment accordingly.

51. Property

51.1 All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor’s default.

52. Release from performance

52.1 If the Contract is frustrated by any event entirely outside the control of either the Employer or the Contractor the Employer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made

F. Special Conditions of Contract

1. Labour:

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

The Contractor shall, if required by the Employer, deliver to the Employer a return in detail, in such form and at such intervals as the Employer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Employer may require.

2. Compliance with labour regulations:

During continuance of the contract, the Contractor shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, Employer shall have the right to deduct any money due to the Contractor including his amount of security deposit. The Employer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor in no case shall be treated as the employees of the Employer at any point of time

3. Protection of Environment:

The contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. During continuance of the contract, the contractor shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

4. Arbitration (Clause 24)

4.1 The procedure for arbitration shall be as follows:

(a) In case of dispute or difference arising between the Employer and the Contractor relating to any matter arising out of or connected with this agreement it shall be settled in accordance with the Arbitration and Conciliation Act 1996. The disputes or differences shall be referred to a Sole Arbitrator. The Sole Arbitrator shall be appointed by agreement between the parties; failing such agreement, by the Appointing Authority (any one of the Organizations as per list enclosed in Annexure)

(b) Arbitration proceedings shall be held at....., Karnataka state (to be filled in by the Employer before issue of the Tender Documents),

(c) The cost and expenses of arbitration proceedings will be paid as determined by the Arbitrator. However the expenses incurred by each party in connection with the preparation, presentation, etc., shall be borne by each party itself.

5. In the case of the death of a Contractor after executing the agreement / commencement of the work, his legal heir, if an eligible registered Contractor and willing can execute and complete the work at the accepted tender rates irrespective of the cost of the work.

6. The Contractor should produce invoice for procurement of Bitumen, Steel, HDPE ducts and Geo-textile material along with bills. No payments will be made without such invoices.

7. Mix Designs for Concrete and Asphalt work should be got approved by Chief Engineer before commencement of Work.

8. 63/51 mm Double Walled Corrugated HDPE Duct should have the inner layer as silicore marking the duct manufacturer and also size of the duct. The Duct should conform to ISO Certification and the colour of duct should be orange or blue for better identity.

9. The Contractor shall provide One four wheeler along with driver, fuel expenses to Project Engineers in-charge of work to facilitate and co-ordinate the supervision of the work.

10. The Contractor shall establish field lab and field office to facilitate quality assurance of execution of works.

11. GST 18% Shall be Paid to the Tendered Amount Separately

[Add other Clauses specific to the work for which tenders are invited.]

Annexure:

LIST OF ORGANIZATIONS WHO ARE CONSIDERED AS APPOINTING AUTHORITY FOR APPOINTMENT OF ARBITRATORS[9]

1. Indian Council of Arbitration, New Delhi;
2. International Centre for Alternative Disputes Resolution (India);
3. Indian Roads Congress;
4. Indian Building Congress;
5. Indian Institute of Bridge Engineers;
6. Indian Institute of Public Health Engineers;
7. Institute of Water Works

[9] Add any other Organization considered suitable.

SECTION 6: CONTRACT DATA

Items marked "N/A" do not apply in this Contract.

The following documents are also part of the Contract:
Clause Reference

- The Schedule of Operating and Maintenance Manuals [48]
- The Methodology and Program of Construction [25]
- Site Investigation Reports [14]
- The Schedule of Key and Critical Equipment to be deployed On the work as per agreed program of construction. [25]

The Employer is:

Name: The Commissioner [1.1]
Address: BBMP, Rajarajeshwarinagara Division, MEI Layout, Bagalagunte, Bangalore-560073
Name of authorized Representative: Executive Engineer
Rajarajeshwarinagara Division Rajarajeshwarinagara zone
Bruhat Bangalore Mahanagara Palike

The name and identification number of the Contract is
[1.1]

Sl. No	Name of the Work
1	"Package No. - 3 - RRND - (a) Construction of R.O Plant,Anganawadi Kendra,Samudaya Bhavana in Akkiyappa Garden in Ward No-17 J.P Park (1 Work), (b) Renovation for Samudayabhavana near Ambedkar Colony Ward No-69 Laggere (1 Work) & (c) Renovation and Construction of GMPS School Mallathahalli (1 Work) & Improvemnts and Development of Anganawadi Kendra Old Mallathahalli in Ward-129

	Jnanabharathi (1Work) - Total (4 Works) in RR Nagar Division for the year 2023-24.”

The Works consist of Filling of Potholes.

The start date shall be the date of issue of notice to proceed with the work. [1.1]

The Intended Completion Date for the whole of the Works is **12 months**[10] with the following milestones [17, 26]

Milestone dates:
Physical works to be completed Period from the date of issue of Notice to proceed with the work

Milestone 1 i.e. Financial Progress for Rs. 187.50 Lakhs within 03 Months from the date of work order
Milestone 2 i.e. Financial Progress for Rs. 187.50 Lakhs within 06 Months from the date of work order
Milestone 3 i.e. Financial Progress for Rs. 187.50 Lakhs within 09 Months from the date of work order
Milestone 4 i.e. Financial Progress for Rs. 187.50 Lakhs within 12 Months from the date of work order

The Site Possession Date is:[11] **Date of work order** [21]

The Site is located at **Rajarajeshwarinagara Zone** [1.1]
And is defined in drawings

The Defects Liability Period is **3 Years**[12]. [31]
Insurance requirements are as under: [13]

	Type of Cover	Minimum cover for Insurance
(i)	Works and of Plant and materials	The sum stated in the Agreement plus 20%
(ii)	Loss or damage to equipment	Full replacement cost
(iii)	Loss or damage to property of Third Party	Full replacement cost
(iv)	Personal injury or death insurance (a) for Third Party	
	(b) for Contractor’s employees or labour	In accordance with the statutory requirements applicable to Karnataka

Price Adjustment Formula;[13] **(DELETED)** [40]

The liquidated damages for the whole of the works are (amount) per day[14] and that for the milestones are as under:

[10] At the time of preparation of the tender document give the period required for completion of whole work and the milestones. When the Agreement is drawn after award of contract the dates can be put in.
[11] At the time of preparation of the tender document give the period after the issue of work order, when the site would be made available to the contractor, for example ‘one week after the issue of work order’
[12] The period should depend up on the period required for testing of the work. In case of building it could be 12 months (passing of one rainy season); for pipe laying work, tanks, water retaining structures, the time required for testing; for canals, lining works, the passing of one monsoon or running of canal whichever is lower; roads and highways passing of one monsoon (12 months)
[13] The Formula has some normal components. It should be changed if need be to suit the nature of the work.

For Milestone 1: Rs **/- per day** [41]
For Milestone 2: Rs **/-per day**
For Milestone 3: Rs **/-Per day**
The maximum amount of liquidated damages for the whole of the works is Ten percent of final contract price. [41]

The amounts of the advance payment are: [42]

Nature of Advance	Amount (Rs.)	Conditions to be fulfilled
1. Mobilization	**5% of the Contract price**	**On submission of un-conditional Bank Guarantee. (to be drawn before end of 20% of Contract period)**

(The advance payment will be paid to the Contractor no later than 30 days after fulfillment of the above conditions).

Repayment of advance payment for mobilization : [42]

The advance loan shall be repaid with percentage deductions from the interim payments certified by the Engineer under the Contract. Deductions shall commence in the next Interim Payment Certificate following that in which the total of all such payments to the Contractor has reached not less than 15 percent of the Contract Price or Three [15] months from the date of payment of first installment of advance, whichever period concludes earlier, and shall be made at the rate of 7.5% percent of the amounts of all Interim Payment Certificates until such time as the loan has been repaid, always provided that the loan shall be completely repaid prior to the expiry of the original time for completion pursuant to Clauses 17 and 26.

[16]The date by which "as-built"[17] **drawings (in scale 1:1000** [18]) in 2 sets are required is within 30 days of issue of certificate of completion of Whole or Section of the Work as the case may be. [48]
[19]The date by which Operating and Maintenance Manuals are required is Within 30 days of issue of certificate of completion of Whole or Section of the Work as the case may be. [48]

The amount to be withheld for failing to supply "as built" drawings or supply of Operation and Maintenance Manuals by the date required is **Rs. _____**
(The amount should be sufficient to get the completion drawings or Operating and Maintenance Manuals prepared by alternative agency in case the contractor fails to submit.) [48]

The following events shall also be fundamental breach of the contract: [49.2]

1. The contractor has contravened Sub-clause 7.1 and Clause 9 of CC.

The percentage to apply to the value of the work not completed representing The Employer's Additional cost for completing the Works shall be 30 percent (30%). [50.1]

[14] The amount is usually computed on the basis of 0.1% of the contract price per day. The amount has to be specified as a round figure nearest to the hundred.
[15] To be filled up by the Employer before issue of the tender document; say 'Three or four months'
[16] Score out whichever is not applicable.
[17] Completion drawings
[18] Specify an appropriate scale
[19] Score out which ever is not applicable.

(Change if need be. It should be sufficient to get the balance of works completed by alternative agency.)

SECTION 7: SPECIFICATIONS

As per specifications mentioned in BOQ

SECTION 8: DRAWINGS
(Enclosed)

SECTION 9: BILL OF QUANTITIES

Sl. No	Description of work	Unit	Sanction		
			QTY	RATE	Rate In Words
1	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead. By Mechanical means A Dismantling Brick / Tile work / rubble masonry / pitching / etc by mechanical means MORTH Specofication-202 . Completed as per Engineer Incharge.	**Cum**	43.07		
2	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead. Dismantling Stone Masonry By Manual means B Rubble stone masonry in cement mortar MORTH Specofication-202 Completed as per Engineer Incharge.	**Cum**	42.00		
3	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead. By Mechanical Means A Cement Concrete Grade M-15 & M-20 MORTH Specofication-202 Completed as per Engineer Incharge.	**Cum**	18.90		
4	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material to the appropriate disposal area as per direction of Engineer-in-charge. G.S. Sheet Completed as per Engineer Incharge.	**Sqm**	192.67		
5	Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated	**Cum**	259.90		

	earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work. In Ordinary/Soft rock upto 300 mm depth. Completed as per Engineer Incharge.				
6	Earth work excavation for Foundation by mechanical means for all works & depth upto 3 m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenaces required to complete the work In ordinary/soft rock without blasting upto 1.5 m depth. Completed as per Engineer Incharge.	**Cum**	602.15		
7	Earth work excavation for Foundation by mechanical means for all works & depth upto 3 m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenaces required to complete the work Depth exceeding 1.5 m, but not exceeding 3 m. Completed as per Engineer Incharge.	**Cum**	425.74		
8	Providing and injecting chemical emulsion for Pre-constructional Anti-Termite Treatment, creating continuous chemical barrier under and around the column pits, walls, trenches, basement excavation, top surface of the plinth filling, junction of wall and floor, along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, surrounding of pipes and conduits with Chlorpyriphos 20% E.C. / Lindane 20% E.C. @ 3.19 ltr/m2 including cost of chemical, diluting in water to one percent concentration, labour, usage charges of machinery, complete as per specifications.Completed as per Engineer Incharge.	**Sqm**	1,104.12		
9	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations and other similar works etc.	**Cum**	104.89		

	in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. Completed as per Engineer Incharge.				
10	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand)Completed as per Engineer Incharge.	**Cum**	70.78		
11	Providing Flush/ Ruled pointing: Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine sand) after raking joints to depth nicely lining, including cost of materials, labour, curing as per specifications and as per directions of Engineer-in-charge	**Sqm**	103.04		
12	Providing and Filling in foundation with granite / trap broken metal 100mm. and down size & with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications.Completed as per Engineer Incharge.	**Cum**	99.55		
13	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:3:6 (M10) Using 20 mm and down size graded crushed coarse aggregates. Completed as per Engineer Incharge.	**Cum**	90.31		
14	Providing and laying in position Reinforced cement concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid	**Cum**	42.53		

	separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates. Completed as per Engineer Incharge.				
15	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates. Completed as per Engineer Incharge.	**Cum**	13.93		
16	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates. **Ground Floor Column Above Plinth Beam**. Completed as per Engineer Incharge.	**Cum**	8.87		
16.1	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with	**Cum**	8.12		

	super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates. **First Floor Column.** Completed as per Engineer Incharge.				
16.2	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates.. **Second Floor Column.** Completed as per Engineer Incharge.	**Cum**	22.30		
16.3	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25	**Cum**	9.56		

	Design Mix Using 20 mm and down size graded crushed coarse aggregates.. **Third Floor Column.** Completed as per Engineer Incharge.				
16.4	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates.. **Fourth Floor Column.** Completed as per Engineer Incharge.	**Cum**	1.19		
16.5	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates.. **Ground Floor Plinth Beam, Slab, Staircase.** Completed as per Engineer Incharge.	**Cum**	71.69		
16.6	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per	**Cum**	18.65		

	relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates.. **Ground Floor Roof Beam, Lintel, Chejja.** Completed as per Engineer Incharge.				
16.7	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates.. **First Floor Roof Slab, Staircase.** Completed as per Engineer Incharge.	**Cum**	47.25		
16.8	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The	**Cum**	14.10		

	cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates.. **First Floor Roof Roof Beam, Lintel, Chejja.** Completed as per Engineer Incharge.				
16.9	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates.. **Second Floor Roof Slab, Staircase.** Completed as per Engineer Incharge.	**Cum**	99.68		
16.10	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates.. **Second Floor Roof Roof Beam, Lintel, Chejja.** Completed as per Engineer Incharge.	**Cum**	33.51		
16.11	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The	**Cum**	23.39		

	granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates.. **Third Floor Roof Slab, Staircase.** Completed as per Engineer Incharge.				
16.12	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates.. **Third Floor Roof Roof Beam, Lintel, Chejja.** Completed as per Engineer Incharge.	**Cum**	3.68		
16.13	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the	**Cum**	3.27		

	work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates.. **Fourth Floor Roof Slab, Staircase.** Completed as per Engineer Incharge.				
17	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification. **Ground Floor** Completed as per Engineer Incharge.	**Tonne**	73.62		
17.1	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification. **First Floor.** Completed as per Engineer Incharge.	**Tonne**	5.44		
17.2	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification. **Second Floor.** Completed as per Engineer Incharge.	**Tonne**	18.05		
17.3	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification. **Third Floor.** Completed as per Engineer Incharge.	**Tonne**	4.56		
17.4	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification. **Fourth Floor.** Completed as per Engineer Incharge.	**Tonne**	0.54		
18	Providing and laying flooring and steps fine	**Sqm**	219.13		

	machine polished granite stone slabs 20 mm thick on cement mortar bed 1:6, 20 mm thick, and joints fin ished with cement mortar 1:3 over existing cement concrete bed , including cost of materials, mortar, labour, curing complete as per specifications.**.Ground Floor.** Completed as per Engineer Incharge.				
18.1	Providing and laying flooring and steps fine machine polished granite stone slabs 20 mm thick on cement mortar bed 1:6, 20 mm thick, and joints fin ished with cement mortar 1:3 over existing cement concrete bed , including cost of materials, mortar, labour, curing complete as per specifications. **First Floor.** Completed as per Engineer Incharge.	**Sqm**	84.54		
18.2	Providing and laying flooring and steps fine machine polished granite stone slabs 20 mm thick on cement mortar bed 1:6, 20 mm thick, and joints fin ished with cement mortar 1:3 over existing cement concrete bed , including cost of materials, mortar, labour, curing complete as per specifications. **Second Floor.** Completed as per Engineer Incharge.	**Sqm**	306.67		
18.3	Providing and laying flooring and steps fine machine polished granite stone slabs 20 mm thick on cement mortar bed 1:6, 20 mm thick, and joints fin ished with cement mortar 1:3 over existing cement concrete bed , including cost of materials, mortar, labour, curing complete as per specifications. **Third Floor.** Completed as per Engineer Incharge.	**Sqm**	19.17		
19	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.** Polished Granite stone slab Black, Cat Eye, River Pink or equivalent. **Ground Floor.** Completed as per Engineer Incharge.	**Sqm**	150.22		
19.1	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm	**Sqm**	166.53		

	thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.** Polished Granite stone slab Black, Cat Eye, River Pink or equivalent. **First Floor.** Completed as per Engineer Incharge.				
19.2	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.** Polished Granite stone slab Black, Cat Eye, River Pink or equivalent.. **Second Floor.** Completed as per Engineer Incharge.	**Sqm**	166.53		
19.3	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.** Polished Granite stone slab Black, Cat Eye, River Pink or equivalent.. **Third Floor.** Completed as per Engineer Incharge.	**Sqm**	112.16		
20	Providing and laying Polished Glazed Vitrified tiles with thickness 10 mm in floor with different sizes with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).. Size of Tile 500x500 mm.	**Sqm**	97.09		

	Ground Floor. Completed as per Engineer Incharge.				
20.1	Providing and laying Polished Glazed Vitrified tiles with thickness 10 mm in floor with different sizes with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).. Size of Tile 500x500 mm. **First Floor.** Completed as per Engineer Incharge.	**Sqm**	108.22		
20.2	Providing and laying Polished Glazed Vitrified tiles with thickness 10 mm in floor with different sizes with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).. Size of Tile 500x500 mm. **Second Floor.** Completed as per Engineer Incharge.	**Sqm**	98.75		
20.3	Providing and laying Polished Glazed Vitrified tiles with thickness 10 mm in floor with different sizes with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).. Size of Tile 500x500 mm. **Third Floor.** Completed as per Engineer Incharge.	**Sqm**	60.92		
21	Providing and laying water proofing treatment to the Roof with PU based single component elastomeric pure polyurethane based coating on New terrace/Chajjas/Sunken portion of WC:Bathroom, cold applied PU waterproofing membrane that is highly elastic with elongation greater than 400% and tensile strength greater than 2MPa as per ASTM D412. The waterproofing membrane to be applied in 2coats @ 1.6kg per m2 to achieve final DFT (dry film thickness) of 1mm including prime coat of	**Sqm**	97.68		

	epoxy primer @150 g per m2 and protection with 120gsm Geo-textile over the waterproofing membrane. The finished cost to include surface preparation, making coving at Junction, Bore Packing, treatment of construction joints completely as per specification & with a 10 years warranty on product & work from certified manufacturers as per the direction of the Engineer In charge. **First Floor.** Completed as per Engineer Incharge.				
21.1	Providing and laying water proofing treatment to the Roof with PU based single component elastomeric pure polyurethane based coating on New terrace/Chajjas/Sunken portion of WC:Bathroom, cold applied PU waterproofing membrane that is highly elastic with elongation greater than 400% and tensile strength greater than 2MPa as per ASTM D412. The waterproofing membrane to be applied in 2coats @ 1.6kg per m2 to achieve final DFT (dry film thickness) of 1mm including prime coat of epoxy primer @150 g per m2 and protection with 120gsm Geo-textile over the waterproofing membrane. The finished cost to include surface preparation, making coving at Junction, Bore Packing, treatment of construction joints completely as per specification & with a 10 years warranty on product & work from certified manufacturers as per the direction of the Engineer In charge. **Third Floor**. Completed as per Engineer Incharge.	**Sqm**	656.70		
22	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x200x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. **Ground Floor.** Completed as per Engineer Incharge.	**Sqm**	343.13		
22.1	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x200x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. **First Floor**. Completed as	**Sqm**	211.87		

	per Engineer Incharge.				
22.2	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x200x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. **Second Floor**. Completed as per Engineer Incharge.	**Sqm**	606.22		
22.3	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x200x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. **Third Floor.** Completed as per Engineer Incharge.	**Sqm**	285.34		
22.4	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x200x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. **Fourth Floor.** Completed as per Engineer Incharge.	**Sqm**	48.77		
23	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x100x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. **Ground Floor.** Completed as per Engineer Incharge.	**Sqm**	58.27		
23.1	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x100x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials,	**Sqm**	51.57		

	labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. **First Floor.** Completed as per Engineer Incharge.				
24	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. **Ground Floor.** Completed as per Engineer Incharge.	**Sqm**	28.04		
24.1	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. **Third Floor.** Completed as per Engineer Incharge.	**Sqm**	24.44		
24.2	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications. **Fourth Floor.** Completed as per Engineer Incharge.	**Sqm**	24.44		
25	Providing 18 mm cement plaster in two coats under layer 12 mm thick cement plaster with cement mortar 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster with cement mortar 1:6 (1 cement : 6 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **Ground Floor**	**Sqm**	675.58		
25.1	Providing 18 mm cement plaster in two coats under layer 12 mm thick cement plaster with cement mortar 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster with cement	**Sqm**	370.97		

	mortar 1:6 (1 cement : 6 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge.. **First Floor**				
25.2	Providing 18 mm cement plaster in two coats under layer 12 mm thick cement plaster with cement mortar 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster with cement mortar 1:6 (1 cement : 6 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **Second Floor**	**Sqm**	760.82		
25.3	Providing 18 mm cement plaster in two coats under layer 12 mm thick cement plaster with cement mortar 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster with cement mortar 1:6 (1 cement : 6 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge.. **Third Floor**	**Sqm**	1,133.23		
25.4	Providing 18 mm cement plaster in two coats under layer 12 mm thick cement plaster with cement mortar 1:5 (1 cement : 5 coarse sand) finished with a top layer 6 mm thick cement plaster with cement mortar 1:6 (1 cement : 6 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **Fourth Floor**	**Sqm**	109.63		
26	Providing 15 mm cement plaster with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall including ounding off corners wherever required smooth rendering, providing and removing scaffolding,including cost of materials, labour, curing complete as per specifications and as per directions of	**Sqm**	387.50		

	Engineer-in-charge. **Ground Floor**				
26.1	Providing 15 mm cement plaster with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall including ounding off corners wherever required smooth rendering, providing and removing scaffolding,including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **First Floor**	**Sqm**	372.43		
26.2	Providing 15 mm cement plaster with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall including ounding off corners wherever required smooth rendering, providing and removing scaffolding,including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **Second Floor**	**Sqm**	561.79		
26.3	Providing 15 mm cement plaster with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement on the rough side of single or half brick wall including ounding off corners wherever required smooth rendering, providing and removing scaffolding,including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **Third Floor**	**Sqm**	220.80		
27	Providing 12 mm cement plaster finished with a floating coat of neat cement of mix :1:61 cement: 6 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **Ground Floor**	**Sqm**	333.00		
27.1	Providing 12 mm cement plaster finished with a floating coat of neat cement of mix :1:61 cement: 6 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **First Floor**	**Sqm**	329.73		
27.2	Providing 12 mm cement plaster finished with a floating coat of neat cement of mix :1:61 cement: 6 fine sand) to brick masonry including rounding off corners	**Sqm**	492.28		

	wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **Second Floor**				
27.3	Providing 12 mm cement plaster finished with a floating coat of neat cement of mix :1:61 cement: 6 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **Third Floor**	**Sqm**	199.56		
27.4	Providing 12 mm cement plaster finished with a floating coat of neat cement of mix :1:61 cement: 6 fine sand) to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **Fourth Floor**	**Sqm**	7.92		
28	Providing 15 mm cement plaster on the rough side of single or half brick wall of mix 1:4 (1 cement: 4 fine sand) including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **Ground Floor**	**Sqm**	53.60		
28.1	Providing 15 mm cement plaster on the rough side of single or half brick wall of mix 1:4 (1 cement: 4 fine sand) including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **First Floor**	**Sqm**	30.15		
28.2	Providing 15 mm cement plaster on the rough side of single or half brick wall of mix 1:4 (1 cement: 4 fine sand) including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **Third Floor**	**Sqm**	33.08		
28.3	Providing 15 mm cement plaster on the rough side of single or half brick wall of mix 1:4 (1 cement: 4 fine sand) including rounding off corners wherever required	**Sqm**	33.08		

	smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge. **Fourth Floor**				
29	Providing White washing with lime to give an even shade :New work (three coats) with lime of approved quality, including cost of materials, labour complete as per specifications and as per directions of Engineer in-charge.	**Sqm**	6,241.78		
30	Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two coat applied @ 1.67 ltr/10 m^2 over and including priming coat of exterior primer applied @ 2.20 kg/10 m^2) with paint of approved quality to give an even shade, after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	**Sqm**	3,791.08		
31	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade :New work (two coats) over and including water thinnable priming coat with cement primer after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.	**Sqm**	2,067.52		
32	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :Two coats on new work after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in--in-charge.	**Sqm**	3,349.94		
33	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ m2 including pointing the joints with white cement and matching pigments etc., complete. **Ground Floor.** Completed as	**Sqm**	37.47		

	per Engineer Incharge.				
33.1	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ m2 including pointing the joints with white cement and matching pigments etc., complete. **First Floor** Completed as per Engineer Incharge.	**Sqm**	8.01		
33.2	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ m2 including pointing the joints with white cement and matching pigments etc., complete.. **Third Floor.** Completed as per Engineer Incharge.	**Sqm**	5.40		
33.3	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ m2 including pointing the joints with white cement and matching pigments etc., complete. **Fourth Floor.** Completed as per Engineer Incharge.	**Sqm**	5.40		
34	Providing skirting, dadooing, rises of steps with white glazed tiles 6mm thick on 10mm thick cement plaster 1:3 and jointed with white cement slurry over existing rough plaster surface using glazed tiles of approved make and size including cost of materials, labour, complete as per specifications. **Ground Floor.** Completed as per Engineer Incharge.	**Sqm**	162.80		
34.1	Providing skirting, dadooing, rises of steps with white glazed tiles 6mm thick on 10mm thick cement plaster 1:3 and jointed with white cement slurry over existing rough plaster surface using glazed tiles of approved make and size including cost of materials, labour, complete as per specifications. **First Floor.** Completed as	**Sqm**	30.15		

	per Engineer Incharge.				
34.2	Providing skirting, dadooing, rises of steps with white glazed tiles 6mm thick on 10mm thick cement plaster 1:3 and jointed with white cement slurry over existing rough plaster surface using glazed tiles of approved make and size including cost of materials, labour, complete as per specifications. **Third Floor.** Completed as per Engineer Incharge.	**Sqm**	5.40		
34.3	Providing skirting, dadooing, rises of steps with white glazed tiles 6mm thick on 10mm thick cement plaster 1:3 and jointed with white cement slurry over existing rough plaster surface using glazed tiles of approved make and size including cost of materials, labour, complete as per specifications. **Fourth Floor.** Completed as per Engineer Incharge.	**Sqm**	5.40		
35	Providing & fixing of louvered ventilator made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free with gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the ventilator frame. The frame having overall size of 39mm x 39mm with GI reinforcement of 1mm thickness. Louver clip in Aluminium (powder coated in white) will be used on the frame along with plastic parts for fixing the 4 mm pin head glass. Wall thickness of frame shall be 2mm.Maximum possible size – 1000mm x 1000mm.(The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made). Completed as per Engineer Incharge.	**Sqm**	7.20		
36	Providing & fixing of 2-track x 2-panel sliding windows made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free, gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the window frame. The outer frame having a overall size of 60mm width x 45mm height with reinforcement of 1mm thickness and Sash with overall size of 39mm X 58mm with GI reinforcement of 1mm for the frame and 1.5 mm for the sash. Coextruded Glazing bead for fixing of glass shall be of size 20mm x 24mm. Windows shall be provided with 5mm plain float glass, standard hardware & single point locking system with touch lock. Wall	**Sqm**	111.24		

	thickness of frame & sash shall be of 2-2.5 mm. Maximum possible size – 1819mm x 1819mm (The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made) Ground Floor. Completed as per Engineer Incharge.				
36.1	Providing & fixing of 2-track x 2-panel sliding windows made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free, gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the window frame. The outer frame having a overall size of 60mm width x 45mm height with reinforcement of 1mm thickness and Sash with overall size of 39mm X 58mm with GI reinforcement of 1mm for the frame and 1.5 mm for the sash. Coextruded Glazing bead for fixing of glass shall be of size 20mm x 24mm. Windows shall be provided with 5mm plain float glass, standard hardware & single point locking system with touch lock. Wall thickness of frame & sash shall be of 2-2.5 mm. Maximum possible size – 1819mm x 1819mm (The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made) **First Floor**. Completed as per Engineer Incharge.	**Sqm**	10.80		
36.2	Providing & fixing of 2-track x 2-panel sliding windows made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free, gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the window frame. The outer frame having a overall size of 60mm width x 45mm height with reinforcement of 1mm thickness and Sash with overall size of 39mm X 58mm with GI reinforcement of 1mm for the frame and 1.5 mm for the sash. Coextruded Glazing bead for fixing of glass shall be of size 20mm x 24mm. Windows shall be provided with 5mm plain float glass, standard hardware & single point locking system with touch lock. Wall thickness of frame & sash shall be of 2-2.5 mm. Maximum possible size – 1819mm x 1819mm (The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made) **Second Floor.** Completed as per Engineer Incharge.	**Sqm**	37.44		
36.3	Providing & fixing of 2-track x 2-panel	**Sqm**	5.40		

	sliding windows made out of multi chambered UPVC(Matching to RAL-9016) sections and with minimum TiO2(Titanium Dioxide) at 6PHR with TPE(Thermo Plastic Elastomer) and lead free, gaskets -grey colour having isolated drainage and reinforced with Galvanized Iron profile through-out the window frame. The outer frame having a overall size of 60mm width x 45mm height with reinforcement of 1mm thickness and Sash with overall size of 39mm X 58mm with GI reinforcement of 1mm for the frame and 1.5 mm for the sash. Coextruded Glazing bead for fixing of glass shall be of size 20mm x 24mm. Windows shall be provided with 5mm plain float glass, standard hardware & single point locking system with touch lock. Wall thickness of frame & sash shall be of 2-2.5 mm. Maximum possible size – 1819mm x 1819mm (The cost is inclusive of all fixtures and separate charges for minor T&P's shall not be made) **Third Floor.** Completed as per Engineer Incharge.				
37	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to steel windows by welding. **Ground Floor.** Completed as per Engineer Incharge.	**Kgs**	3,076.92		
37.1	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to steel windows by welding. **First Floor**. Completed as per Engineer Incharge.	**Kgs**	226.80		
37.2	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to steel windows by welding. **Second Floor**. Completed as per Engineer Incharge.	**Kgs**	198.72		
37.3	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to steel windows by welding. **Third Floor**. Completed as per Engineer Incharge.	**Kgs**	124.20		
38	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two coat applied @ 0.90 ltr/10 m^2 over an under coat of primer applied @ 0.80 ltr/10 m^2 of approved brand and manufacture including preparing the surface after	**Sqm**	178.92		

	thorougly cleaning oil, grease, dirt and foreign matter, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge.				
39	Providing Mathi/Nandi wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, usage charges complete as per specifications. **Ground Floor.** Completed as per Engineer Incharge.	**Cum**	0.90		
39.1	Providing Mathi/Nandi wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, usage charges complete as per specifications. **First Floor**. Completed as per Engineer Incharge.	**Cum**	0.06		
39.2	Providing Mathi/Nandi wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, usage charges complete as per specifications. **Second Floor**. Completed as per Engineer Incharge.	**Cum**	0.11		
39.3	Providing Mathi/Nandi wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, usage charges complete as per specifications. **Third Floor**. Completed as per Engineer Incharge.	**Cum**	0.06		
40	Providing and fixing in position fully panelled Matti/Nandi wood shutters for doors with, stiles and rails of 35mm. thick with bottom and lock rails 180mm wide top rail and stiles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, usage charges complete as per specifications. (excluding cost of fixtures) **Ground Floor**. Completed as per Engineer Incharge.	**Sqm**	31.71		
40.1	Providing and fixing in position fully panelled Matti/Nandi wood shutters for doors with, stiles and rails of 35mm. thick	**Sqm**	1.89		

	with bottom and lock rails 180mm wide top rail and stiles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, usage charges complete as per specifications. (excluding cost of fixtures) **First Floor**. Completed as per Engineer Incharge.				
40.2	Providing and fixing in position fully panelled Matti/Nandi wood shutters for doors with, stiles and rails of 35mm. thick with bottom and lock rails 180mm wide top rail and stiles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, usage charges complete as per specifications. (excluding cost of fixtures) **Second Floor**. Completed as per Engineer Incharge.	**Sqm**	3.78		
40.3	Providing and fixing in position fully panelled Matti/Nandi wood shutters for doors with, stiles and rails of 35mm. thick with bottom and lock rails 180mm wide top rail and stiles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, usage charges complete as per specifications. (excluding cost of fixtures) **Third Floor**. Completed as per Engineer Incharge.	**Sqm**	1.89		
41	Providing and fixing Fiber Glass Reinforced plastic (FRP) Door Frames of cross- section 90 mm x 45 mm having single rebate of 32 mm x 15 mm to receive shutter of 30 mm thickness. The laminate shall be moulded with fire resistant grade unsaturated polyester resin and chopped mat. Door frame laminate shall be 2mm thick and shall be filled with suitable wooden block in all the three legs. The frame shall be covered with fiber glass from all sides. M.S. stay shall be provided at the bottom to steady the frame Completed as per Engineer Incharge.	**Mtr**	120.60		
42	Providing & fixing Factory made 100% carpenter friendly ready to use Single Solid Plain Wood Polymer Composite (WPC) flush shutter of 35mm thickness which is anti termite and having high water absorption property. The cost includes cost of materials, transportation, labour and fixing charges. Completed as per Engineer Incharge.2023-24)	**Sqm**	34.02		
43	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid oor/window/Clerestory windows & other Frames/Chowkhat comprising of virgin PVC polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibres (wood powder/rice husk/wheat husk) and non toxic additives	**Rmt**	12.00		

	(maximum toxicity index of 12 for 100 g) fabricated with miter joints after applying PVC solvent cement and screwed with full body threaded star headed SS screws having minimum frame density of 850 kg/m3, screw withdrawal strength of 2200 N (Face) & 1100 N (Edge), minimum compressive strength of 58 N/mm2 , modulus of elasticity 900 N/mm2 and resistance to spread of flame of Class A category with property of being termite/borer proof, water/moisture proof and fire retardant and fixed in position with M.S hold fast/lugs/SS dash fasteners of required dia and length complete as per direction of Engineer-InCharge. (Fixtures shall be paid for separately).Size 62 x 100mm. Completed as per Engineer Incharge.				
44	Providing & fixing 30mm thick factory made rigid foam Panelled Door Shutters made from M.S. tube of 19 gauge thickness, size 19x19mm for stiles and 15x15mm for top & bottom rails, covered with heat moulded PVC C channel of 5mm thick sheet & 30 x 50mm wide to form stiles & 5mm thick & 75mm wide PVC Sheets for top rail, lock rail & bottom rail on either side & 5mm thick 20mm wide PVC sheet as gap insert for top rail & bottom rail, Panelling of 5mm thick PVC sheet fitted in the M.S. Frame, Sealed to the stiles & rails with 5x30mm PVC sheet beading on either side & joined together with solvent cement adhesive etc., Complete as per manufacturers specification & direction of Engineer-in-charge fixed to frames with 3 nos of 75 mm Aluminium hinges.(Sl.No-12.53 I,No-104 of Vol-2 SRB-2023-24)	**Sqm**	3.78		
45	Providing and fixing Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge. **Ground Floor**	**Kgs**	1,792.00		
45.1	Providing and fixing Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings, frames, guard bar,	**Kgs**	3,048.14		

	ladder, railings, brackets, gates and similar works including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge. **Third Floor**				
45.2	Providing and fixing Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge. **Fourth Floor**	**Kgs**	###### ###		
46	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per m2 as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 m or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling/self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of urlins, rafters and trusses and including cutting to size and shape wherever required. **Ground Floor**. Completed as per Engineer Incharge.	**Sqm**	35.84		
46.1	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per m2 as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 m or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling/self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of urlins, rafters and trusses and including cutting to size and shape wherever required. **Third Floor.** Completed as per Engineer Incharge.	**Sqm**	70.06		

46.2	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per m2 as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 m or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling/self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of urlins, rafters and trusses and including cutting to size and shape wherever required. **Fourth Floor.** Completed as per Engineer Incharge.	**Sqm**	224.85		
47	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer. M.S.tube including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer in-Charge. **Ground Floor**	**Kgs**	2,287.39		
47.1	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer. M.S.tube including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer in-Charge. **First Floor**	**Kgs**	2,331.06		
47.2	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer. M.S.tube including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer in-Charge. **Second Floor**	**Kgs**	2,084.64		
47.3	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer. M.S.tube including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer in-Charge. **Third Floor**	**Kgs**	2,183.40		

47.4	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer. M.S.tube including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer in-Charge. **Fourth Floor**	**Kgs**	962.88		
48	Providing Tensile Roofing upto 10m ht with single coloumn and beam Which includes Supplyfabrication & erection of MS structure including columns, rafters purlinsconnecting platesgusset plate, base plateanchor bolt etc of Primary supporting steel structure will be fabricated from MS Structural steel tubular sections (Yield Strength 210) of make TATAApolloJindalLoha or other equivalent with coat Anti-corroson treatment followed by one coat of priming with Enamel primer followed by two coats of Enamel paint of makes Asian/Berger/C Coler code as approved and Patterningseaming supply & fixing of PVDF coated polyester Valmex Mehatop PH 900 Type II or Serge Ferrari 90282 fabric Both sides PVDF lacquered Protected against microbial and fungal attack and UV Protected & accessories Supply & foxing of Aluminum extrusions for clamping fabric to surface of steel structure with bolts for faxing. latumen or silicon washers to ensure water tightness Supply & fixing of Galvanized accessories which includes Cables, End plates, SocketsTensioners & Hardwares Analysis and Design of membraneerection and tensioning inclusive of all taxes with all leads and lift and as per the direction of Engineer Incharge.	**sqm**	117.20		
49	Providing and fixing Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc.complete. Hot finished seamless type tubes including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge.	**Kg**	438.72		
50	Providing and laying in position Reinforced cement concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers,	**Cum**	156.00		

	well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M30 Design Mix Using 20 mm nominal size graded crushed coarse aggregates. Completed as per Engineer Incharge				
51	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M30 Design Mix Using 20 mm nominal size graded crushed coarse aggregates. Completed as per Engineer Incharge	**Cum**	93.60		
52	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes finsishing concrete structure in line, all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M30 Design Mix Using 20 mm nominal size graded crushed coarse aggregates. Completed as per Engineer Incharge	**Cum**	105.30		

53	Providing and laying in position Cement Concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates. Completed as per Engineer Incharge	**Cum**	61.85		
54	Wet Mix Macadam (Plant Mix Method) Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. Completed as per Engineer Incharge	**Cum**	61.85		
55	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in- charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.) including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge. **Ground Floor**	**Kg**	266.33		
55.1	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the	**Kg**	174.96		

	railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in- charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.) including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge. **First Floor**				
55.2	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in- charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.) including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge. **Second Floor**	**Kg**	194.40		
55.3	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in- charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.) including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge. **Third Floor**	**Kg**	213.84		
56	Providing and fixing mirror of superior glass (of approved quality) andof required shape and size with plastic moulded frame of approvedmake and shade with 6 mm	**Each**	7.00		

	thick hard board backing : Oval shape 450x350 mm (outer dimensions). Completed as per Engineer Incharge				
57	Providing and fixing water closet squatting pan (Indian type W.C. pan)with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests. Completed as per Engineer Incharge	**Each**	15.00		
58	Providing and fixing white vitreous china wash basin including making all connections but including the cost of fittings.Flat back wash basin of size 630x450mm. Completed as per Engineer Incharge	**Each**	7.00		
59	Providing and fixing rectangular high density polyethylene water storage loft tank with cover, conforming to ISI: 12701, colour of opaque white or as approved by Engineer-in-charge the rate includes making necessary holes for inlet, outlet & over flow pipes. The base support /c fittings & fixtures for tank shall be paid separately. Completed as per Engineer Incharge	**L**	7,000.00		
60	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A,including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i)Single socketed pipes 100 mm diameter. Completed as per Engineer Incharge	**Mtr**	12.00		
61	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :Brace Bib Cock , Completed as per Engineer Incharge	**Nos**	18.00		
62	600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 g. Completed as per Engineer Incharge	**Each**	6.00		
63	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) 20mm pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings, including fixing the pipe and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same	**Mtr**	650.00		

	including testing of joints complete(concealed work including cutting chases and good the walls etc,. Completed as per Engineer Incharge				
64	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) 25mm pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings, including fixing the pipe and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete(concealed work including cutting chases and good the walls etc, Completed as per Engineer Incharge	**Mtr**	760.00		
65	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931. Completed as per Engineer Incharge	**Nos**	16.00		
66	Providing and fixing 100 mm sand cast Iron grating for gully trap) Completed as per Engineer Incharge	**Nos**	21.00		
67	13.4-Providing and fixing Brass full way valve gate with C.I. wheel of approved quality (screwed end) :50 mm nominal bore. Completed as per Engineer Incharge	**Nos**	20.00		
68	Providing and fixing unplasticised PVC connection pipe with brass unions 45 cm length, 20 mm nominal bore. Completed as per Engineer Incharge	**Each**	13.00		
69	S.C.I. gully or nahani grating 100 mm dia. Completed as per Engineer Incharge	**Each**	25.00		
70	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Flexible Pipe 32 mm dia. Completed as per Engineer Incharge	**Each**	9.00		
71	Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to Eureopean type W.C. of quality and make as approved by Engineer - in - charge. Completed as per Engineer Incharge	**Each**	15.00		
72	Flushing Cistern P.V.C. 10 lts capacity (low level) (White) (with fittings, accessories and flush pipe). Completed as per Engineer Incharge	**Each**	8.00		
73	Water purification plants: Supplying, Installation and Commissioning of automatic Water purification plant (RO+UF) with all accessories piping, product water tank on single phase power supply as per the enclosed detailed Technical Specifications including cost of material, loading and unloading and as directed by the Engineer in charge. (Ref-detailed specification enclosed seperatly).	**Each**	2.00		

	Note:- 1.The above rates mentioned are only for the preparation of estimate purpose. 2. All items are to be of BSI /NFS standards,with BSI / NFS mark . 3. Tenders to be invited for procurement. 4. No direct payment should be made under any situation or condition or on any account. 5. After commissioning of plant necessary testing to be done for the satisfactory of Engineer Incharge. Note : Refer the ANNEXURE : F for Detailed Specification of Each components For 150 LPH : Cabin Type. Completed as per Engineer Incharge				
74	CONCEALED CONDUIT SYSTEM: Supplying heavy gauge PVC conduit pipe ..... dia ..... mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc , and fixing using inverted wood plugs in case of RCC ceiling and RCC wall/ stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. 1.2.1-19/20mm dia 2mm thick. Completed as per Engineer Incharge	**Mtr**	680.00		
74.1	CONCEALED CONDUIT SYSTEM: Supplying heavy gauge PVC conduit pipe ..... dia ..... mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc , and fixing using inverted wood plugs in case of RCC ceiling and RCC wall/ stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. 1.2.2-25mm dia 2mm thick. Completed as per Engineer Incharge	**Mtr**	540.00		
75	Supplying and fixing sheet Metal box made out of 18 SWG sheet metal with necessary holes for cable/conduit entry as required with one coat of primer of approved make etc. 1.4.1-75x75x65mm .Completed as per Engineer Incharge	**Each**	180.00		
75.1	Supplying and fixing sheet Metal box made out of 18 SWG sheet metal with necessary holes for cable/conduit entry as required with one coat of primer of approved make etc. 1.4.3-135x75x65mm. Completed as per Engineer Incharge	**Each**	130.00		
76	Supplying and fixing PVC/metal conduit Deep junction box 1.5.1-19/20mm deep junction box. Completed as per Engineer Incharge	**Each**	215.00		
76.1	Supplying and fixing PVC/metal conduit Deep junction box .1.5.2-25mm deep junction box. Completed as per Engineer	**Each**	223.00		

	Incharge				
77	Extra for Groove cutting in brick wall/CC floor to the suitable depth for concealing of Conduit/GI pipe and plastering, finishing upto wall surface complete. Completed as per Engineer Incharge	**Mtr**	800.00		
78	Supplying And Fixing "S" Hook made out of 14 mm dia M.S. Rod. Completed as per Engineer Incharge	**Nos**	28.00		
79	Suplplying and fixing Metal fan box with round hook. Completed as per Engineer Incharge	**Nos**	28.00		
80	Point wiring using copper wire with switch: Supplying and wiring adopting loop system in existing PVC Conduit /casing capping using 2x1.5mm2 (Phase & Neutral) & 1x1.0 mm2 (Earth wire) FRLS multi strand PVC insulated copper wire (confirming to IS-694: and latest amendments) with a 6A flush type SP control switch shall be fixed on the existing plastic sheet/ gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. 2.1.1-a) Short point upto 3Mtrs from tapping point to out let via switch. Completed as per Engineer Incharge	**Each**	123.00		
80.1	2.1.2-b) Medium point above 3Mtrs upto 6Mtr from Tapping point to out let via switch. Completed as per Engineer Incharge	**Each**	83.00		
81	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments. I Group A 2.3.1) 1.0 sqmm. Completed as per Engineer Incharge	**Each**	800.00		
81.1	2.3.3) 2.5 Sqmm	**Each**	670.00		
81.2	2.3.4) 4.0 sqmm	**Each**	510.00		
81.3	2.3.5) 6.0 sqmm	**Each**	360.00		
82	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box. 3.5.1) 1 to 3 module. Completed as per Engineer Incharge	**Each**	122.00		
82.1	3.5.2) 4 module	**Each**	78.00		
82.2	3.5.3) 6 module	**Each**	66.00		
82.3	3.5.4) 8 module	**Each**	52.00		
82.4	3.5.5) 10-12 module	**Each**	39.00		
83	Supplying & fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF,	**Each**	14.00		

	energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 5.18.1) 6-32 Amps SP. Completed as per Engineer Incharge				
83.1	5.18.2) 40 Amps SP	**Each**	12.00		
83.2	5.18.4) 6-32 Amps DP	**Each**	10.00		
84	Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc, for operation on 230 V, 50 cycles. Single phase AC supply conforming to ISS-374- 1979 and with double ball bearing system. a) 48" Sweep (1200mm) Regular model. Completed as per Engineer Incharge	**Each**	29.00		
85	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293. Stepped Fan Regulator. Completed as per Engineer Incharge	**Each**	29.00		
86	Supplying and fixing Moulded Case Circuit Breaker (MCCB)over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit in Therma lMagnetic Release. Micro processor release shall have Earth Fault as per IS-13947. (Icu=100% lcs). In 4P MCCB, all Poles should have protection for Short-Cicrcuit/Over Load. For Microprocessor MCCBS Facility for segregating Priority and Non-Priority loads must be available in the MCCB. MCCB shall be provided with double insulation (insulation between front cover and internal power circuits to avoid any accidental contact with live current carrying path with the front cover open). Multi-pole breakers shall be designed to break all the poles simultaneously and they shall have a single mechanism.Three Pole . 100Amps 25kA. Completed as per Engineer Incharge	**Each**	6.00		
87	Chemical earthing for grounding. Conduits @ cutouts other equipments backfill compound which is non-corrosive, thermally conductive, potential to permissible limits, superor Fault conduction capacity, non toxic, weather resistance & capable of achiveing ohmic value less than one I ohm Using 6ft. Copper bonded rod with backfill compound. Completed as per Engineer Incharge	**Each**	4.00		
88	Supplying and fixing regular MCB distribution boards on wall/wood board / flush mounting using required clA, bolts,	**Each**	8.00		

	nuts etc., with provision for fixing suitable type capacity MCB's single phase/3 phase/single door with powder coated painting Made out of 14 SWG MS enclosure. Completed as per Engineer Incharge				
89	Supplying and fixing of slim box fitting, made out of CRCA Sheet metal body with locking type holder completely wired. Excluding Ballast & Fluorescent Tube. Completed as per Engineer Incharge	**Each**	55.00		
90	Supplying and fixing/replacing of fluorescent tube. Completed as per Engineer Incharge	**Each**	55.00		
91	Providing, supplying to work site,Single Phase Submersible Pump Sets of 100mm dia (4 inch) suitable for bore well confirming to IS 8034-2000 specifications,with testing of as per instructions of engineer incharge of work and latest amendments. 1.00 HP/0.75KW - 7 STG(stage) Completed as per Engineer Incharge	**Each**	3.00		
92	Supplying and drawing Flexible Multicore Cable manufactured with electrolytic grade flexible copper with low conductor confirming to IS 8130-1984 and (Virgin) PVC insulation sheathed suitable for working voltage upto 1100V as per IS-694:2010 4C x 6 mm2 Completed as per Engineer Incharge	**Each**	200.00		
93	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. In all kinds of soils Depth upto 1.5 m Completed as per Engineer Incharge	**Cum**	72.00		
94	Supplying and drawing Flexible Multicore Cable manufactured with electrolytic grade flexible copper with low conductor confirming to IS 8130-1984 and (Virgin) PVC insulation sheathed suitable for working voltage upto 1100V as per IS-694:2010 4C x 6 mm2. Completed as per Engineer Incharge	**Mtr**	100.00		
95	Earth work excavation by manual means	**Cum**	26.30		

	for drains,canals, waste weir draft, approach channels, key trench, foundation of Bridges and such similar works, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, excavated surface leveled and sides neatly dressed disposing off or leveling the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage & other appurtenances required to complete the work. In ordinary/soft rock without blasting upto 1.5 m depth Completed as per Engineer Incharge				
96	Providing and laying in position plain cement concrete Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Completed as per Engineer Incharge	**Cum**	5.77		
97	Providing and laying in position Reinforced cement concrete M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) Completed as per Engineer Incharge	**Cum**	3.72		
98	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption	**Sqm**	46.13		

	less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ m2 including grouting the joints with white cement and matching pigments etc., Complete. Size of Tile 500x500 mm. Completed as per Engineer Incharge				
99	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length andb jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters. 80x1.25 mm M.S. laths with 1.25 mm thick top cover including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge. Completed as per Engineer Incharge	**Sqm**	6.50		
100	Raw water Feed pump with starter,Type-Horizontal ,Centrifugal.Make-Kirloskar/Beacon weir/Sumo/CNP(SS),Material of Construction-Cast Iron,Head-36 MWC. Motor-3.0HPthree phase.Starter-L&T Siemen make push botton type DOL Starter. Completed as per Engineer Incharge	**Nos**	2.00		
101	Multi graded sand filter,type-verticle,Floor Mounted,Make-pentair/structural/ION EXCHANGE(INDIA) LTD/Zeolite/Aquario,min.operating Pressure 2.0kg/cm2,Max. Operating Pressure -3.5kg/cm2, Treatment Flow Rate-6000liters/Hr,Type of valve size-Multiport,50NB,make-UKL/Initiative,Filtering Media -Gravel,Graded Sand & Pebble. Completed as per Engineer Incharge	**Nos**	2.00		
102	Activated carbon Filter type-Verticle,Floor Mounted,Make-pentair/Structural/ION EXCHANGE(INDIA) LTD/Zeolite/Aquario,min.operating Pressure 2.0kg/cm2,Max. Operating Pressure -3.5kg/cm2, Treatment Flow Rate-6000liters/Hr,Type of valve size-Multiport,50NB,make-UKL/Initiative,Filterin	**Nos**	1.00		

	g Media -Gravel, Activated Carbon & pebbles. Completed as per Engineer Incharge				
103	Water Softner,type-Verticle,Floor Mounted,Make-pentair/Structural/ION EXCHANGE(INDIA) LTD/Zeolite/Aquario,min.operating Pressure 2.0kg/cm2,Max. Operating Pressure 3.5kg/cm2, Treatment Flow Rate-6000liters/Hr,Type of Resin INDION 220Na or Thermax T40. Completed as per Engineer Incharge	**Nos**	1.00		
104	Antiscalant Dosing System,Equipment Required-Electronic Dosing Pump with Solution Tank,make-Ion Exchange (I) Ltd.,/ASIA LMI/Zeolite,Material of Construction-PP(Polypropelene),Discharge @Max Back Pressure-2.88litr/Hr @8bar,Discharge@Nominal Back Pressure=3.12Lit/Hr @ 4Bar,Chemical to be dosed-INDION Antiscalant. Completed as per Engineer Incharge	**Nos**	1.00		
105	Accessories for Dosing System,Solution Tank-One No,Volume-100Litres,Material of Construction-HDPE,Tank level Switch-One No. Completed as per Engineer Incharge	**Nos**	1.00		
106	Reverse Osmosis System,Type-Horizontal Skid,Floor Mounted,Permeate water-Minimum 2000litr/hr,Maximum Permissable TDS in feed (PPM)-2500. Completed as per Engineer Incharge	**Nos**	1.00		
107	Pressure Vessel,Material of Construction-FRP,Make-Advance Composite/Code Line. Completed as per Engineer Incharge	**Nos**	1.00		
108	Membrane, Type-Brackish water . Nos required-Three.Make-TORAY JAPAN /Hydranautics/ Filmtec/ Tricep. Completed as per Engineer Incharge	**Nos**	1.00		
109	High pressure pump,Type-verticle,multistage,Make-GRUNDFOS,MOTOR-7.5 HP 3Phase, Model-CRN series,Material of construction-SS316,starter-L&T/Seimens make push botton type DOL starter. Completed as per Engineer Incharge	**Nos**	1.00		
110	Micron Filter,Type -JUMBO,Material of construction of housing-poly propelene. Completed as per Engineer Incharge	**Nos**	1.00		
111	Instruction, Wet panel -Ms powder coated., Mounted on R.O> skid, Low pressure switch-one No,High Pressure Switch-one, Digitalconductivity Meter wiyh sensor , Indon brand-one No , ON/OFF selector Switch -one No, High pressure System Pressure Gauge - one No, Auto Flush Timer -one No, Indication Lamps -one No, product Flow Meter- one No, Reject Flow Meter-one No,Reject Re-circolation Meter-	**Nos**	1.00		

	one No,Alarm-one No. Completed as per Engineer Incharge				
112	pH correction dosing System, Equipment Required-Electronic Dosing Pump with solution Tank, Make-Ion Exchange(1) Ltd.,/ASIA LMI/Zeolite,Material of construction -PP, Discharge @ max . Back Pressure-2.88 Lit/Hr@8Bar.Discharge@Nominal Back Pressure-3.12 Lit/Hr@4Bar,Frequency-100 Strokes / Min, Chemical to be dosed-PH Booster. Completed as per Engineer Incharge	**Nos**	1.00		
113	Solution Tank with level switch, Solution Tank-one No, Volume-100 Liters. Material of construction-HDPE. Tank levelswitch-one No. Completed as per Engineer Incharge	**Nos**	1.00		
114	Inter-connecting pipe work ,Raw water tank to feed pump suction and feed pump delivery to R.O. Inlet (up to High pressure pump in let)and RO outlet to Treated water tank-food Grade PVC pipe 40mm NB, Make-Finolex/ supreme,High pressure pump outlet to membrane inlet-ss pipe of required size, Approximate Length-35.0 Metre. Completed as per Engineer Incharge	**Nos**	1.00		
115	Ultra violet system, Model-UVS-20,Make-Ion Exchange (I) Ltd.,/ASIA LMI/Zeolite,ALFA Flow rate-2000L/H. Completed as per Engineer Incharge	**Nos**	1.00		
116	RO water strong tank, 2000 ltrs SS tank, to store RO water with required nozzles. Completed as per Engineer Incharge	**Nos**	1.00		
117	Wending Machine ,Digital Swiping Card Type. Completed as per Engineer Incharge	**Nos**	1.00		
118	Earth work in surface excavation by mechanical means for lowering & leveling the ground without blasting for all works other than foundation in Ordinary/Soft rock & depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work all kinds of soils upto 300 mm depth - Completed as per Engineer Incharge	**Cum**	814.81		

119	Dry Lean Cement Concrete Sub- base Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ m3 , optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 t vibratory roller, finishing and curing Morth Spection-601. Completed as per Engineer Incharge	**Cum**	296.10		
120	Construction of Granular Sub-Base of required grading as per design mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 For Grading -V Material. Completed as per Engineer Incharge	**Cum**	373.10		
121	Construction of M30 grade un-reinforced, dowel jointed, plain cement concrete pavement over a prepared sub base with Cement at 420 kg/m3, coarse and fine aggregate conforming to IS 383:2016, maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design transported to site, laid with a paver finisher, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing . Completed as per Engineer Incharge	**Cum**	296.10		
122	Cutting transverse contraction joints 3 to 4 mm wide and depth 60mm in concrete slab using concrete cutting machine with diamond studded saw within 48 hours of casting of bay / slab etc. complete including subsequent widening of the groove 8 to 10 mm. wide at top having depth of 15 mm. as directed by Engineer incharge.MoRTH 602.6.3 . Completed as per Engineer Incharge	**Cum**	394.80		
123	Earth work excavation by manual means	**Cum**	3.89		

	for drains,canals, waste weir draft, approach channels, key trench, foundation of Bridges and such similar works, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, excavated surface leveled and sides neatly dressed disposing off or leveling the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage & other appurtenances required to complete the work. In ordinary/soft rock without blasting upto 1.5 m depth. Completed as per Engineer Incharge				
124	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately)Mix 1:4:8(M5) Using 40 mm nominal size graded crushed coarse aggregates. Completed as per Engineer Incharge	**Cum**	0.49		
125	Providing and laying in position Reinforced cement concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates. Completed as per Engineer Incharge	**Cum**	1.73		
126	Supply ,Installation, Testing and commissioning of polel/wal mounted 2MP out door IP day night Veri Focal Bullet camera made out of hard plastic body confiming to IP67 weather prooting th	**Each**	18.00		

	CM0s 1.0 inch image sensor, image resolution HD 1920x1080 pixels veri lence IR tange ot 30 mtr or more auto zoom and auto exposure.focal length of 2.8 to12 at 25 fps frame rate Dual compressed video streeming suitabie to operate on 12 volt DC supply at -25 degree to +50 centigrade temperature with 95% relative humidily along with neccssery fixing. materials etc comalete (Hikission model DS-2CD162FWD-I OR Equivelent) GEM-I-5116877-19839969643). Completed as per Engineer Incharge				
127	Supply ,Installation, Testing and commissioning of polel/wal mounted 4MP out door IP day night Veri Focal Bullet camera made out of hard plastic body confiming to IP67 weather prooting th CM0s 1.0 inch image sensor, image resolution HD 1920x1080 pixels veri lence IR tange ot 30 mtr or more auto zoom and auto exposure.focal length of 2.8 to12 at 25 fps frame rate Dual compressed video streeming suitabie to operate on 12 volt DC supply at -25 degree to +50 centigrade temperature with 95% relative humidily along with neccssery fixing. materials etc comalete (Hikission model DS-2CD164FWD-I OR Equivelent) GEM-I-5116877-41803742350). Completed as per Engineer Incharge	**Each**	12.00		
128	Supply Installation Testing and Commissioning of Rack Mounted 8 Channel power over power over Ethernet (POE) Ethernet network unmanaged switch made out of Alluminum body conforming to IP66 Weather proofing at 10 degree to 50 centigrade temperature along with necessery fixing Materilas etc complete(Netgear make GS30BP or Equivelent)Gem-I-5116877-74144255718). Completed as per Engineer Incharge	**Each**	18.00		
129	Supply and Fixingof Assorted bracket for Fixing PTZ camera using necessery clamps bolts etc complete(GEM-I-56116877-014264528534). Completed as per Engineer Incharge	**Each**	12.00		
130	Supply Installation, Testing and commissioning of Rack mounled Four channel Network Video Recorder (NVR) made out of Alluminium body confirming to IP66 weather proofing supporting IP PTZ image resolution HD 128Ox1080 pixels, Recording speed of at 25 fps frame rate or more,Having HDMI,VGA Bluetooth intertace facility Multi playback optons,SATA1 HDD recording Support and sutable to operate on 230 velt 50 hzs AC	**Each**	4.00		

	supply at 10 degree to 50 centigrade temperature along with necessery fixing materals etc complete (Hikvission model DS-7P04NI- E1 OR Equivelent (GEM-I 5116877-31868270804). Completed as per Engineer Incharge				
131	Supply Installation, Testing and commissioning of Rack mounled Eight channel Network Video Recorder (NVR) made out of Alluminium body confirming to IP66 weather proofing supporting IP PTZ image resolution HD 128Ox1080 pixels, Recording speed of at 25 fps frame rate or more,Having HDMI,VGA Bluetooth intertace facility Multi playback optons,SATA1 HDD recording Support and sutable to operate on 230 velt 50 hzs AC supply at 10 degree to 50 centigrade temperature along with necessery fixing materals etc complete (Hikvission model DS-7P04NI- E2 OR Equivelent (GEM-I 5116877-78482283042). Completed as per Engineer Incharge	**Each**	4.00		
132	Supply Instalation Testrg and coomissionng of Rack mounted Two Terrabyte (2 TB) 7200 rpm SATA1 hard disk drive (HDD) along with necessery fixng materials etc.complete (western Digital WD 21B 4585 OR Equivelent) (GEM--5116877- 18692446478). Completed as per Engineer Incharge	**Each**	4.00		
133	Supply Instalation Testrg and coomissionng of Rack mounted Four Terrabyte (4 TB) 7200 rpm SATA1 hard disk drive (HDD) along with necessery fixng materials etc.complete (western Digital WDWD40PURZ OR Equivelent) (GEM--5116877- 49116118249). Completed as per Engineer Incharge	**Each**	4.00		
134	Supply and Fixing of 24f optical Fibre cable splice clouser for over head transmission using necessery clamps bolts etc complete(GEM-I-5116877-330009245291). Completed as per Engineer Incharge	**Each**	6.00		
135	Supplying and Fixing LC/PC TO LC/PC Single mode Simplex patch Cord 1 Mtr Length (GEM-I-5116877-28079315216). Completed as per Engineer Incharge	**Each**	40.00		
136	Supplying and Fixing SC to SC Fiber patch cord 3mtr Length (GEM-I 5116877-36000691868). Completed as per Engineer Incharge	**Each**	40.00		
137	Supply Installation Testing and Commissioning of Rack Mounted Fiber Optic Media Converter along with necessery fixing materilas etc Complete	**Each**	4.00		

	(D-Link Model)DEF-855S-15 OR Equivalent) (GEM-I-5116877-3642852680) Completed as per Engineer Incharge				
138	Supply, Installation Testing and Commissing of Rack Mounted 12 Volt DC 4Amps 8 channel CCTV Camera power supply unit with over voltagesshort circuit and surge protection suitable to operate on 230volt,50Hzs Ac Supply(GEM-I-5116877-12055192319). Completed as per Engineer Incharge	**Each**	10.00		
139	Supply, Installation Testing and Commissing of Rack Mounted 12 Volt DC 4Amps 16 channel CCTV Camera power supply unit with over voltagesshort circuit and surge protection suitable to operate on 230volt,50Hzs Ac Supply(GEM-I-5116877-12055192319). Completed as per Engineer Incharge	**Each**	10.00		
140	Supplying Installation testing and Commissioning of 24 inch LED Computer Monitor Suitable operate on 230 volt,50hzs AC Supply (HP Make Or Equivelant(GEM-I-5116877-24797872332). Completed as per Engineer Incharge	**Each**	4.00		
141	Supply, Installation Testing and Commissioning of 55 Inch LED large Formate Display Samart Television of repute make Suitable to operate on 230 Volt 50 Hzs AC Supply(Samsung make PMH or Equivelent). (GEM-I-5116877-17558963535). Completed as per Engineer Incharge	**Each**	4.00		
142	Supply Installation Testing and Commissioning of Indoor AC47-60Hz frequency 12.5KA Class B+C one port SPD low Voltage Surge Protector conforming to IP20 on Exiting board using necessery screws wires etc Complete. (GEM-item code-5116877-65076663505)). Completed as per Engineer Incharge	**Each**	4.00		
143	Supply and Drawing3+1 PVC insulated Shielded 0.4mm dia copper cable conforming to TEC Spections G/W1R06/02.2 pair cable for CCTV System in Existing pipe .Duct using neccessery clamps bolts etc Complete. (GEM-I-5116877-22724894784). Completed as per Engineer Incharge	**Each**	220.00		
144	Supplying and Drawing 6F Armoured Optocle Fibre in Exisintg Pipe Duct Using necessery clamps bolts etc complete. (GEM-I-5116877-70580514194). Completed as per Engineer Incharge	**Each**	300.00		
145	Supplying, erecting, testing & commissioning of OFF- LINE UPS system suitable for operation on 230V, 50Hz, A/C supply, with all accessories complete and	**Each**	2.00		

	Excluding batteries and wiring complete 2 kVA OFF LINE UPS. Completed as per Engineer Incharge				
146	Supplying, installation, testing & commissioning of 12V DC, AH batteries in poly propylene container for U.P.S. Sealed maintenance free batteries. 150 AH capacity . Completed as per Engineer Incharge	**Each**	5.00		
147	Geophysical investigation at site for sinking borewells for supplying drinking water to the habitation either through the Hand Pump MWS or P.W.S.S, by vertical electrical sounding by adopting Venner or Schlumbergers's method, including reconnaissance survey of geological formation. Geophysical investigation of existing ground water in the vicinity, its quality, quantity and acceptability of the users, indicating the location of the site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 metre in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instruments and accessories to work site, engaging technical personal and labour required etc. NOTE: 1) Additional rate on item 1&2 is allowed for drilling in over burden and fixing Casing pipes beyond 20 M (for fixing Casing pipes only) a) Above 20 M and upto 30 M - 15%, b) Above 30 M - 30% (Measurement of overburden is restricted to the depth of casing pipe fixed excluding initial depth of 20M and projection above ground level). 2) A sum of Rs. 100/- is to be deducted for Dry Borewell towards yield test. (P-No 140, It No 12.4,Vol-V BWSSB SR 2023-24)	**No**	2.00		
148	Sinking of Borewell of 165mm dia clear using super fast hydraulic rig of capacity 300 PSIG & above 1100 CMF & above in all strata including over burdern upto 20 m. Fixing of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of rig and supporting vehicle, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (Excluding cost of casing pipes, collars, cap etc., complete) (P-No 139,It No 12.1 Vol-V BWSSB SR 2023-24) 0.00 to	**Rmt**	100.00		

	50.00m				
149	50 to 100 m	**Rmt**	100.00		
150	100 to 150 m	**Rmt**	100.00		
151	150 to 200 m	**Rmt**	100.00		
152	200 to 250 m	**Rmt**	100.00		
153	250 to 300 m	**Rmt**	100.00		
154	300 to 350 m	**Rmt**	100.00		
155	Providing and fixing PVC pipe - OD 250mm and 6 Kg/sqcm (P-No A-44,Sl No-651 Vol-V BWSSB SR 2023-24)	**Mtr**	40.00		
156	Supply of ISI mark 175mm nominal bore,plain and steel casing pipe grade of steel Fe 410 of wall thickness conforming to IS 4270-2001 and latest ammendments, electrical resistance welded steel tubes, material and conforming to IS 1387-1993 and manufactured by basic open hearth electric or basic oxygen process in random length of 5-7m both ends.threaded conforming to IS 554-1985 one end fixed with socket conforming to IS 4270-2001 and the other end with screwed pipes all shall be responsibaly free from defects. The tubes shall be responsible straight end should be with ISI marking weighing 25.10kg/m.prices include Collar-Medium duty.(P-No 143,It No 12.32 Vol-V BWSSB SR 2023-24)	**Each**	22.00		
157	Providing and fixing MS casing collars as per IS 1239 (part-II) 1982 with all latest amendments if any for any dia. The thickness of plate used for covering one end shall be 3mm (minimum). The dimensions of caps and colars shall be strictly as per IS 1239 (Part-II) 1982 with all amendments,(P-No 143,It No 12.33 Vol-V BWSSB SR 2023-24)	**Each**	3.67		
158	Providing,supplying to work site, Submersible Pump Set of 150mm dia suitable for bore well and confirming to IS 8034-2000;3Phase, SS Bowl & Impeller with Low volt Motor as per pecifications,as per necessary ammendments and instructions of engineer incharge of work. (For 10.00 HP -135 LPM @ 168m=12 STG Outlet Dia-2.00") P-No 152,It No 13.16.5 Vol-V BWSSB SR 2023-24)	**Each**	2.00		
159	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. External work 50mm Nominal Dia pipes (I.no-13.33.6 Vol-2 Page No 123 Vol II SR-2023-24)	**Mtr**	660.00		

160	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to13:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100 V as per IS-694:1990. 3CX4.0 sq.mm (PWD Ele SR Vol-VI 2023-24,P-7/It-2.6.2)	**Rmt**	1,320.00		
161	Gunmetal non-return valve-vertical (screwed end) 50 mm dia.(Vol-II SR 2023-24,Pg.No(A-25 /Sl no.425)	**Each**	2.00		
162	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) 50mm Nominal Bore :(SR 2023-24 Vol-II P.No 119 I.No 13.10.6)	**No**	2.00		
163	Supply and delivery at site wrought middle steel (galvanized) GI elbow confirming to IS 1239-II, 1991 with latest amendments if any for 50mm dia GI elbow(P-No 129,It No 11.7.6 Vol-V BWSSB SR 2023-24)	**No**	2.00		
164	Supply and delivery at site wrought middle steel (galvanized) GI hexagonal nipple confirming to IS 1239-II, 1991 with latest amendments if any.For 50mm dia GI Hexagonal Nipple(P-No 132,It No 11.14.6 Vol-V BWSSB SR 2023-24)	**No**	2.00		
165	Providing wrought mild steel (galvanized) GI collar confirming to IS 1239-II, 1991 with latest amendments if any.. For 50 mm dia GI collar:(P-No 129,It No 11.6.6 Vol-V BWSSB SR 2023-24)	**Each**	110.00		
166	Supply and fixing polished wood board made of not less than 15mm thick plank on both sides of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws.20"x20"x2.5", (PWD ELE SR 2023-24 Vol-VI P.no.14/I no.5.6.6)	**Each**	2.00		
167	Supplying & fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.(PWD Ele SR 2023-24 Vol-VI ,P-17/Sl no.5.18.6) 50-63 A DP	**No**	2.00		
168	Supplying of TPST with rewirable porcelain channels in SM encloser made out of 14 SWG powder coated point of approved colour 32 amps (PWD Ele SR 2023-24 Vol-VI, P-14, It-5.5.1)	**No**	2.00		
169	Supplying and fixing of LED type panel	**No**	2.00		

	board indicating lamp with required colour suitable for 230/440VAC. 50 Hz 12/24V D.C.(PWD Ele SR 2023-24 Vol-VI,P-19,It no.5.38)				
170	Supplying fully automatic star-delta starter unit push button type with suitable wires, 3 contactors, one adjustable thermal timer mounted on a common base plate held in steel enclosure for use on 400/440 V 3 phase and wired after fixing to the existing wooden board for motor. upto 12.5HP (PWD Ele SR 2023-24 Vol-VI,P-14,It no.-5.2.1)	**No**	2.00		
171	Supplying and fixing single phase preventer using necessary wires over an existing panel board suitable for motor upto 20 HP capacities.(PWD Ele SR 2023-24 Vol-VI,P-14/Sl no.5.3)	**No**	2.00		
172	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:2010 confirming to latest amendments. I Group A 4sqmm (PWD-Ele-SR 2023-24, P-5, It no-2.3.4)	**Mtr**	30.00		
173	Supplying, fixing and wiring heavy duty low voltage capacitors conforming to IS 2834. 3 phase, 400/440 V grade, for power factor improvement of rotating machineries like induction motor (PWD Ele SR 2023-24 Vol-VI ,P.No-19/Sl no.5.37)	**KVAR**	4.00		
174	Earthing: Supplying and fixing and wiring earth electrode for grounding circuits IC cutouts and other quipments on the meter board in the pit. The pits should be filled up with equal proportion of salt and charcoal 150mm around the pipe to complete depth. The connection from the pipe to the conduits etc. is to established through GI wire of sizes as per clause 7.3.3 of IS 732 using 12mm bolts, nuts, washers and check nuts, the pipe shall have 16 through holes of 12mm dia.(P-No 157,It No 13.39 Vol-V BWSSB SR 2023-24)	**Each**	4.00		
175	Earth work excavation for pipeline trenches in all kinds of soils by mechanical means as per drawing and technical specifications, including setting out, construction of shoring, strutting, barricading, caution lights, bracing, using sight rails & bonding rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required , utilising the available excavated earth locally for the work etc., and all other	**Cum**	29.70		

	appurtenances complete in the following strata. . In all kinds of soils. Depth upto 1.50m (P.No-10 I.No- 1.17.1 Vol-1 CSR-2023-24)				
176	1.1 kV, XLPE or Heat resistant PVC insulated, PVC exutruted Inner Seath Armoured LTUG Cable as per IS-1554 (Part 1) or IS-7098 Part-1, Armouring strip thickness and resistivity as per IS-3975 6sqmm,2 core(24 GI Wire-1.4mm)(Pg No 13,It No 32.01,Sl No 197,Material Code 287054 ESCOM SR 2023-24 Vol VI)	**Km**	0.11		
177	Supplying heavy gauge PVC Conduit Pipe .... dia ..... mm thick with suitable size bends, metal junction boxes adhesive paste etc., by groove cutting in the wall and fixing by bracing U or J hooks and cement plastering upto the wall surface and run with 18 SWG GI fish wire run throughout the conduit wherever necessary 32 mm dia 2.5 mm thick(PWD Ele SR 2023-24 Vol-VI, P.No-2 ,It-1.3.3)	**Mtr**	110.00		
178	Providing, Laying and Fixing GI pipes conforming to IS 1239:1990 with latest amendments complete with GI fittings (excluding the cost of fittings) with cuts and threads wherever necessary, including testing for water tightness, with all lead and commissioning. (contractor will make his own arrangements for procuring water for testing) For Medium Duty GI pipe:: Medium Duty GI pipe of 25mm dia(P-No 127,It No 11.2.3 Vol-V BWSSB SR 2023-24)	**Mtr**	8.00		
179	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers. 63 amps(PWD Ele SR 2023-24 Vol-VI,P-14,It-5.7.3)	**No**	2.00		
180	Earth work excavation for pipeline trenches by mechanical means as per drawing and technical specifications, including setting out, construction of shoring, strutting, barricading, caution lights, bracing, using sight rails & bonding rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required , utilising the available excavated earth locally for the work and all other appurtenances to complete in the following strata.. Ordinary/soft rock (without requiring blasting) Depth upto 1.50 m (PWD SR 2023-24 Vol-I, P.No 10, I.No 1.19.1)	**Cum**	14.85		
181	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS	**Mtr**	110.00		

	15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings, this includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete. (external work) - 50mm nominal OD pipes (PWD SR 2023-24 Vol-II, P-123, It-13.33.6)				
182	Providing and fixing normal gauge polythene pipes of approved quality with special flange pression type fittings of approved make including trench excavation and refilling etc. for EXTERNAL WORKS with: 50mm nominal bore pipes(P-No 191,It No 16.7.4 Vol-V BWSSB SR 2023-24)	**Mtr**	110.00		
183	Refilling available earth around trenches/pipelines, cables in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with a lead upto 50 m , and lift upto 1.5 m. Including cost of all labour complete as per specifications. (PWD SR 2023-24 Volume I P.No 7 I.No 1.10)	**Cum**	31.19		
184	Providing and fixing Brass full way valve gate with C.I. wheel of approved quality (screwed end) 65 mm nominal bore PWD SR 2023-24 Volume II P.No 117 I.No :13.4.5	**Each**	4.00		
185	Providing and fixing brass stop cock of approved quality :15mm Nominal Bore(PWD SR 2023-24 Volume II P.No 117 I.No :13.3.1)	**Each**	4.00		
186	BESCOM deposit Charges and miscellaneous	**No**	2.00		
187	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work.In all kinds of soils Depth upto 1.5 m.Item No.1.4.1,Page No.(5), Vol I CSR 23-24	**Cum**	667.92		
188	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in	**Cum**	109.08		

	layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately).Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates.Item No.2.1.3,Page No.15, Vol I CSR 23-24				
189	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other.appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately).M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates.Item No.2.4.2,Page No.16, Vol I CSR 23-24	**Cum**	215.88		
190	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification Item No.2.11h ,Page No.18, Vol-1 SR 23-24	**Tonne**	13.36		
191	Providing and laying 100mm thick pre-cast cover slabs over Road side drains / utility ducts / Rain water harvesting pit of width not exceeding 1000 mm using M20 concrete reinforced with TMT bars Fe 550 @ 6kg/m2, slabs jointed in CM 1:3 proportion and nicely finished Including providing holes in the Cover slabs wherever necessary for easy drainage of surface water including of labour, materials, scaffolding, usage of machinery, curing, lead and lift charges etc, Complete.Item No.17.14 Page No.177, Vol	**Sqm**	540.00		

	II SR-23-24				
192	Providing & laying precast drain cover slab of 230 mm thickness in CM 1:3 including cost of all materials, labour, curing, transportation, loading, unloading etc, complete as per the directions of the Engineer In Charge.(1.8 x 0.60 x 0.23) (Approved Data rate)(M25 Design Mix)	**Sqm**	67.20		

SECTION 10: FORMAT OF BANK GUARANTEE FOR SECURITY DEPOSIT

To: ..... *[name of Employer]*
..... *[address of Employer]*

WHEREAS ..... *[name and address of Contractor]* (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. ..... dated : ..... to execute .....*[name of Contract and brief description of Works]* (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of Rs. ..... *[amount of guarantee]* [20]_Rupees.....*[in words]*, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of ..... *[amount of guarantee]*[21] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until 30 days from the date of expiry of the Defects Liability Period.

Signature and seal of the guarantor _____
Name of Bank _____
Address _____
Date _____

[20] An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract

[21] An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract